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SUPPLEMENTARY MATERIALS AND METHODS

Animals

All mice used in this study were raised in conventional type 2 cages with the same bedding and enrichment material (carton house and nesting material) in a dedicated breeding room with controlled temperature (21°C) and humidity (50%) under a 12-hour light/dark regular cycle with light on from 7 am till 7 pm for mice for Neo⁺ and Neo⁻ *Arc/Arg3.1* KO1 lines and from 8 pm till 8 am for mice for Neo⁻ *Arc/Arg3.1* KO2 line. All the experimental mice were placed in the same breeding room of the animal facility. KO1 mice were raised in conventional health housing status, exempt from any monitored viral, bacterial, mycoplasma, fungi, parasites, or pathological lesions, except detected mouse Norovirus and *Helicobacter* spp. All Neo⁺ and Neo⁻ *Arc/Arg3.1* KO1 mice were bred on a mixed 50% C57BL/6J – 50% 129S2 background (Charles River, France), while Neo⁻ *Arc/Arg3.1* KO2 mice were bred on a pure C57BL/6J background. Following the heterozygous breeding scheme, independent cohorts were generated from a minimum of three different homozygous non-inbred couples. All experimental mice were sexually naïve and between 7 and 9 weeks of age (2 months) when starting the experiments, while maternal behavior was tested in 3- to 4-month-old females, once they had reached optimal reproductivity.

Composition and sequencing of Neo⁺ Arc/Arg3.1 KO1 construct

Using PCR with different couples of primers (primer sequences in [Table S6](#)), we validated the genotype, length and order of the genomic components of the Neo⁺ *Arc/Arg3.1* KO1 mice construct: d2EGFP (Fg com & Rg mut KO genotyping primers), Neomycin (F Neo & R Neo

Neomycin genotyping primers) and *Arc/Arg3.1* coding sequence (F Neo & R1 and Fg com & Rg WT genotyping primers). Interestingly, while the first intron length was similar to the reference genome (Fq2 & Rq2 primers), the second intron was longer than expected (band around 2000 bp vs. 187 bp in the reference genome, using Fq1 & Rq1 primers). Using Sanger sequencing on F Neo & Rq2-amplified genomic DNA, we determined the Neo⁺ *Arc/Arg3.1* KO1 genome sequence between the Neomycin cassette and exon2:

```
GGCAATACATGCAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTCAGCGCAGGGGCGCCCGTTCT
TTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAAGTGCAGGACGAGGCAGCGCGGCTATCGTGGCT
GGCCACGACGGGCGTTCCTTGCGCAGCTGTGCTCGACGTTGCTACTGAAGCGGGAAGGGACTGGCTGCT
ATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTATCTCACCTTGCTCCTGCCGAGAAGTATCCATCATGG
CTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACCTGCCATTGACCACCAAGCGAAACATCG
CATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGCATCA
GGGGCTCGCGCCAGCCGAAGTGTTCGCCAGGCTCAAGGCGCGCATGCCCGACGGCGATGATCTCGTCGT
GACCCATGGCGATGCCTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTCTGGATTCATCGACTGT
GGCCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTT
GGCGGCGAATGGGCTGACCGCTTCTCGTGCTTTACGGTATCGCCGCTCCCGATTGCGAGCGCATCGCCT
TCTATCGCCTTCTTGACGAGTTCTTCTGAggggatcaattctctagagctcgtgatcagcctcgactgtgccttctagttgcca
gcatctgttgtttgccctccccctgcttcttgaccctggaaggtgccactcccactgtcctttcctaataaaaatgaggaaattgcatcg
cattgtctgagtaggtgtcattctattctgggggggtgggggtggggcaggaagcaagggggaggaattgggaagacaatagcaggcatgc
tggggatgcggtgggctctaggcttctgaggcggaagaaccagctggggctcgaatcaagctgatccggaacccttaataATAAC
TTCGTATAatgtatgcTATACGAAGTTATtaggtccctcgacctgcagcccaagctaggCCGCGGGGTGGGCCGGCC
GCCAAACCAATGTGATCCTGCAGATTGGTAAGTGCCGAGCTGAGATGCTGGAACACGTACGGAGGA
CCCACCGCATCTGTTGACCGAAGTGTCCAAGCAGGTGGAGCGAGAGCTGAAAGGGTTGCACAGGTC
GGTGGGCAAGCTGGAGAACAAGTGGGACGGCTACGTGCCACCGGCGACTCACAGCGCTGGAAGAA
GTCCATCAAGGCCTGTCTTTGCCGCTGCCAGGAGACCATCGCCAACCTGGAGCGCTGGGTCAAGCGTG
AGATGCACGTGTGGAGGGAGGTCTTCTACCGTCTGGAGAGGTGGGCTGACCGCTGGAGTCCATGGG
GGCAAATACCCAGTGGGACGAGCCGGCCCGCCCACTGTCTCTGTAGGTGTGGGGGGTCCAGAGC
CCTACTGCCAGGAAGCTGATGGCTATGACTATAACGTTAGCCCCTATGCCATAACCCGCCACCTGCCGC
AGGAGAAGTGCCTGAACAGGAGTCAGTTGAGGCTCAGCAATATCAGTCTTGGGGGCCAGGTGAGGAT
GGGCAACCGAGCCCTGGTGTGGATACACAGATCTTCGAGGACCCACGGGAGTTCCTGAGCCACCTGGA
AGAGTACCTGCGGCAGGTGGGTGGCTCTGAAGAATATTGGCTGTCCAGATCCAGAACCACATGAATG
GGCCAGCCAAGAAGTGGTGGGAGTTCAAGCAGGGCTCGGTGAAGAAGTGGGTGGAGTTCAAGAAGG
AGTTTCTGCAATACAGTGAGGGTACACTCTCCCGTGAAGCCATTGAGCGGGAGCTGGAGCTGCCGAG
AAGCAGGGTGAACCACTCGACCAGTTCCTCTGGCGCAAGCGGGACCTGTACCAGACACTGTATGTGA
CGCTGAGGAGGAGGAGATCATTAGTATGTGGTGGGCACCCTGCAGCCCAAAGTCAAGCGCTTTCTGC
GCCACCACTCCCAAGACCCTGGAGCAGCTTATCCAGAGGGGTATGGAAGTGCAGGACGGCCTGGA
GCAGGCAGCTGAGCCTTCTGGCACCCCACTGCCACAGAGGATGAGACGGAGGCACTCACACCTGCTC
TTACCAGCGAGTCAGTAGCCAGTGACAGGACCCAGCCTGAATAGAGGGGCCAGCCAGGGTCCCCAGC
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CCGCCTGCCACCCCAGCCTGTGGCTTTTGCCAACTAGGACTTGAGCTGGGGCTGACTCCCAAAGGGATGC
CCTGTCCGCCAGACATCTACTCACCCACTGACCTGGCCTGACTCACAACTGCCACACAACCATGCTACATG
GACGAACATCAAGAAGCCCCTTTCCCATAGGGCTCCCACCTGCCGCCTACCCCTCATCTGTCTGCCCTGGC
CTGGCCCCCAGCCCCATTGGCCTCACCTCTACACTCTCAGACCATCACAGAACACGATCTGGCTTCTCAT
TCTGCTCCAGTGTCCAGGGCTCTTTGGGTAATCAAGAAACCAAGTGTCTGAAAGGCAACAAAAGTAGGC
CCCAAACCCCCGGGGGCATTCTAGGGCAAATGGTAAAACAGAGATGCTGAGGGAACCTAAATTTTCGGG
GAAGCAACCCCCTTCTGCAGACCCAACAGATTCAAGTGGTACCCTAACTGCCCCCGGGCAACCGGCCCG
TTTTGGGCAGCAAACTCCCCTCCCCGGGGGGAGGTGAAACCCCAAAGCAGTGAAACAGCAGACCTGA
CATCCCGGCCCTCTGGCCCCCGGggagccccccccgggtttttgagggggggggggggcgctgcagaaccaagtcca
ctttccaggagccctcaaggcttcctagcaattagttgcaagggtggagtgaagtggcatcagagtggtgtcattgtagtggcactg
gcactcacggtccaaggacggggctgaggtggggcggttctgggggaattgctaagccagctcaccga

The Neomycin coding sequence (violet) was inserted with the bovine GH (Growth Hormone) polyadenylation sequence (grey) and spacer regions (italics) flanking the LoxP site (grey, frame) before the *Arc/Arg3.1* coding sequence (capitals, bold) deleted of 48bp as reported (1), the exon 1 3' UTR (capitals), followed by the first intron (orange). Although a predicted ORF of 456bp in the 3' end *Arc/Arg3.1* coding sequence could lead to a potential truncated *Arc/Arg3.1* protein of 151 amino acids (17.5kDa), no regulatory elements are present to allow protein translation.

Generation of Neo⁻ Arc/Arg3.1 KO1 mouse line

Neo⁺ *Arc/Arg3.1* KO1 mice ¹ (JAX stock #007662) contain a neomycin (Neo) resistance cassette flanked by loxP sites within the *Arc/Arg3.1* gene locus (Neo⁺ KO1 line; **Figure S1**). To examine the potential effects of the Neo cassette on social behavior, a new line without the Neo cassette (Neo⁻ KO1) was generated by site-specific recombination. Neo⁺ *Arc/Arg3.1*^{+/-} and KO1 males were bred with transgenic females expressing Cre recombinase (Cre/Cre genotype) under the control of the aromatase promoter (Aro), which leads to Cre expression in the gonads and therefore allows recombination and germline transmission. PCR was used to confirm successful recombination in

the first generation (F1), with primers binding to the *Arc/Arg3.1* promoter and Neo cassette (**Rg mut** and **Rg WT**), shown in the figure below), and Neo cassette (**Neo3** and **Neo4**). Additional primers were used to verify the *Arc/Arg3.1* locus genotype (**Rg mut** and **Fg com**), and the presence of Cre recombinase in the genome. In the second breeding round, non-inbred $\text{Neo}^+ \text{Arc/Arg3.1}^{+/-}$ Aro-Cre^{Tg/+} males and females from the F1 generation were bred and resulted in Neo cassette removal from one *Arc/Arg3.1* locus. $\text{Neo}^+ \text{Arc/Arg3.1}^{+/-}$ Aro-Cre^{Tg/+} and $\text{Neo}^- \text{Arc/Arg3.1}^{+/-}$ Aro-Cre^{Tg/+} mice from the F2 generation were then bred with wild-type (WT) mice to eliminate the Cre recombinase from the genome. Finally, $\text{Neo}^- \text{Arc/Arg3.1}^{+/-}$ mice without Cre recombinase in the genome were bred to obtain WT and Neo^- KO1 mice. Following the heterozygous breeding scheme, independent experimental cohorts were generated from a minimum of three different homozygous non-inbred couples. The primers used for genotyping are reported in **Table S6**.

Behavior experiments

All behavioral tests were carried out starting at the beginning of the light phase of the cycle to avoid any circadian cycle effect on behavior. One behavioral test was performed per day in a dedicated quiet room with controlled temperature (21°C) and humidity (50%), under a dim light intensity of 15 lux (except 400 lux for motor stereotypies and 60 lux for novelty-suppressed feeding test) by using the standard behavioral equipment. All floors were covered with an aluminum foil coated with a textured, non-reflective gray epoxy neutral paint to allow normal locomotion, well-being, and reduced anxious-like behaviors. Each type of behavior was tested in at least two behavioral paradigms. The experiments were performed by trained experimenters

not blinded to the genotypes and treatments as treatment was provided per cage and genotypes were labelled on cages. In all except one cohort, maternal behavior was tested in females that had undergone other behavioral tests approximately 4 weeks before setting the breeding for maternal behavior assays. All behavior experiments were conducted in several cohorts of mice. In the three-chambered, open-field, spatial Y-maze, novelty-suppressed feeding, elevated-plus maze, and all the memory tests the videos were recorded from above using a USB black and white camera with 2.8-12 mm varifocal optic and ANY-maze software (Stoelting, Ireland). In the motor stereotypies, social recognition, pup retrieval, olfactory habituation/dishabituation, food localization, innate olfactory preference, olfactory avoidance, resident-intruder aggression, string, and homing tests the videos were recorded from the side using a Sony HD FDR-AX33 4K Camescop. In the dominance tube, marble-burying tests, nesting quality evaluation, and pup reflexes tests no videos were recorded as the scoring was done in real-time by an experienced experimenter.

Maternal behavior

Two genotype- and age-matched primiparous dams were bred with a male of the same or opposite genotype for two weeks. After that period, the males were removed, and the dams were isolated in type 2 cages with extra enrichment (including a carton shelter, standard nesting material, and two cotton pads). The litter in their home cages was not changed until the end of the pup retrieval test to minimize disturbance. Fertility parameters such as delivery latency, litter size, percentage of dead pups in the litter, and percentage of pups with milk in their stomach were measured for each dam on postnatal days (PND) 0, 1, and 2. The maternal behavior experimental design included evaluation of nesting quality approximately five days before and

five days after parturition (after the pup retrieval test), and the pup retrieval test conducted on PND 3-5.

Evaluation of nesting quality

In a clean home cage of the experimental dams, two cotton pads were placed on the opposite side of the cage from the carton shelter in the afternoon. The next morning, the nest was observed, and nesting quality was ranked according to the criteria published in ².

Pup retrieval test

On pup post-natal days (PND) 3-5, experimental dams with more than four pups in the litter were habituated in their home cages to the experimental room one to two hours before testing. After habituation, dams were briefly removed from their home cages (<1 min), and four pups from the litter were scattered on the opposite side of the cage from the nest. The dams were returned to their home cages by placing them in the nest with the remaining pups, the cage was closed with a clean grid without water or food and the behavior of the dams was recorded for 30 min. The latency of the dams to retrieve each pup to the nest, the total amount of time, number, and duration spent crouching, nesting, licking or sniffing the pups, self-grooming, digging outside the nest, and being outside the nest, as well as the latency to reach full maternal behavior (spending >1 min in the nest over the pups after all the pups have been retrieved and grouped) were measured. Retrieval was defined as a dam placing a pup into the nest. Crouching was defined as the dam being immobile in a hunched-back position over the pups in the nest, and it was scored once the pups were retrieved and grouped. Unlike other behavioral parameters that were observable throughout the 30-minute pup retrieval test, crouching behavior was not visible when dams completely enclosed their nests after pup retrieval, which was at different time for WT and

[Arc/Arg3.1 KO1 females](#). Licking or sniffing the pups was defined as the dam touching the pups with her nose or mouth and it was scored before retrieval when pups were visible outside the nest. Nesting was defined as collecting nesting material and placing it on the nest or around the nest to reduce dispersity in the cage.

Social interactions

Three-chambered test and complex social interaction in the Live Mouse Tracker (LMT) were performed as previously described ^{3,4}. Briefly, in the three-chambered test, experimental mice were subjected to four phases of 10 min separated by 5 min intervals: the habituation phase with empty grid cages, the sociability phase with unfamiliar sex- and age-matched WT interactor “mouse” versus Lego toy “object”, the social novelty phase with the “familiar” WT interactor from the sociability phase and a “novel” unfamiliar sex- and age-matched WT interactor replacing the toy, and the mate preference phase with the novel “familiar” WT interactor from the social novelty phase and a genotype-matched cage mate. The total amount of time, number, and mean duration of chamber entries, nose contacts to interactor, object or empty grid cages, the total distance traveled, self-grooming episodes, and immobility were measured.

For the complex social interaction in the LMT, up to four sex- and age-matched experimental mice were subjected to social interaction in the open field of the LMT across three consecutive trials which consisted of three interactions on separate days. The trials included interaction with up to four cage mates, followed by interaction with 2 unfamiliar WT and 2 unfamiliar [Arc KO1](#) mice, and finally, interaction with 4 genotype-matched mice. Different parameters of the social interaction were automatically scored from the SQLite database using Python scripts developed by de Chaumont *et al.* ⁵.

Social memory

Social recognition test

Experimental mice were habituated to a clean conventional type 2 cage with fresh bedding for five minutes, after which they were subjected to four testing trials of 5 min separated by one-hour or 24-hour intervals. In the first trial, each experimental mouse met an unfamiliar age- and sex-matched WT interactor. One hour later, in the second trial, the experimental mice met the same interactor from the first trial. 24 hours later, in the third trial, the experimental mice met the same interactor mouse from the first and second trials. Finally, one hour later in the fourth trial, they met another unfamiliar age- and sex-matched WT interactor. The total amount of time, the number of visits, and mean duration spent in nose contact, self-grooming, self-grooming within 5 seconds following social contact, paw contacts, attacks, following, rearing, circling, huddling episodes, and the total time immobile were measured.

Social dominance and aggression

Dominance tube test

A dominance tube test adapted from Pallé *et al.*⁶ was performed to test the inter- and intra-cage hierarchy of the experimental mice. The test consisted of five days of training and three days of testing in a conventional type 3 cage for rats using a plexiglass tube (35 cm long, 3 cm diameter) with moving transparent plexiglass gates in the middle. During the first three days of training, testing mice were placed with their cage mates for 30 minutes in a testing cage with the tube. In the remaining two training days the mice were individually placed in a testing cage with a tube and trained to cross the tube eight times, four times from each side without going back. On each testing day, each experimental mouse met an unfamiliar age-, sex-, and size-matched mouse of

the opposite genotype to determine their dominance. This type of trial was performed four times for each experimental mouse. Each pair of animals was placed at the same time at each end of the tube allowing them to meet in the middle with the tube gates closed. The trial started by opening the gates and ended when one of the two animals retreated all four paws from the tube. Animals that retreated were considered losers from the trial and the other winners. Fifteen minutes after the dominance testing, the mice were tested to determine their intra-cage hierarchy. The experimental mice met each of their cage mates individually and the testing was performed as previously described. The number of wins on each testing day in dominance trials was measured, and the hierarchical status (dominant, intermediate, and subordinate) was determined for each experimental mouse by considering animals at the top, middle, and bottom of the hierarchy in the cage, respectively.

Stereotyped and compulsive behavior

Motor stereotypies test

Experimental mice were recorded individually in a clear conventional type 2 cage filled with a 3-4 cm thick layer of fresh litter for 10 minutes. The total time, number, and mean duration of self-grooming and digging for repetitive behaviors, the number of vertical jumping, circling, head shakes, and scratching episodes for stereotyped behaviors, as well as the total time spent immobile, and the number of rearing events, were measured.

Marble-burying test

Experimental mice were individually placed in a clean type 2 cage containing 20 glass marbles (diameter: 1.5 cm) evenly spaced on 4-cm thick fresh litter. After 15 min, the animals were removed from the testing cages, and the number of marbles not buried, buried more than half,

more than two-thirds, or completely buried in the litter was determined by a trained experimenter. Marbles buried more than half were defined as marbles for which approximately 50% of the surface could be seen and those buried more than two-thirds as marbles for which only a small part of the surface could be seen in the litter. The number of marbles completely buried was determined by subtraction of the total number of marbles and the number of marbles buried more than half and more than two-thirds.

Spatial Y-maze test

Spatial Y-maze test was performed as previously described ³. Briefly, each experimental mouse was placed in one random arm of the Y-maze and was allowed to freely explore the three arms for 5 min. The percentage of spontaneous alternation (SPA), alternative arm returns (AAR), and same arm returns (SAR) determined from a triplet of arm entries was measured using ANY-maze software as well as the total distance traveled, the mean speed, the number of entries (entry of the 4 paws inside an arm), the total time, number and mean duration spent in each arm and analyzed using a custom-made Python script.

Anxious-like behavior

Open-field test

Experimental mice were placed for 10 minutes in an open-field arena (Ugo Basile, Italy; 100 x 100 cm) divided by 4 dark gray opaque partitions and walls in 4 open fields (46 x 46 cm). The total distance traveled, the total amount of time, the number of entries, the mean duration of center and corner entries, and the total time spent immobile were measured.

Novelty-suppressed feeding test

Novelty-suppressed feeding (NSF) test was performed on 16h-food-deprived mice, isolated in a standard housing cage for 30 min before individual testing. Three pellets of ordinary lab chow were placed on a white tissue in the center of each open-field arena filled with a thin layer of fresh litter and lit at 60 lux. Each mouse was placed in a corner of an arena and allowed to explore for a maximum of 10 min. Latency to feed was measured as the time necessary to bite a food pellet and was scored in real-time by a trained experimenter. Immediately after an eating event, each mouse was transferred to a clean conventional type 2 cage and allowed to feed on lab chow up to 60 min after the test. Food consumption in the cage 15 min and 60 min after the test was measured.

Elevated plus maze test

An elevated plus maze test was performed in a labyrinth of 4 arms 5 cm wide and located 80 cm above the ground. Two opposite arms were opened (without walls) while the other two arms were closed by side walls without the top cover. The experimental mice were placed in a closed arm of the maze and their behavior was recorded for 5 min. The total distance traveled, the total amount of time, the number of entries, and the mean duration of open-arm and closed-arm entries, as well as the total time spent immobile, were measured.

Motor coordination

String test

The testing apparatus consisted of two strings, one with and one without ridges, 38 cm long with 2 mm diameter, placed on the wooden support 49 cm above the bench surface. An empty clean cage was placed under the string for the mice to fall into. The test started by placing each

experimental mouse with all four paws on the center of the string. Their latency to fall and duration of hind-limb grasp were measured in real-time by an experienced experimenter during 2 min of the test. If the mouse did not fall, its latency to fall was measured as the maximal duration of the test. The testing was first performed on a string with ridges and one and a half hours later on a string without ridges.

Olfaction

Olfactory habituation/dishabituation test

Experimental mice were first habituated in a clean conventional type 2 cage where the test took place with a clean piece of 2 cm x 2 cm Whatman paper glued to the side of the cage with adhesive paste for 5 min. 20 μ L of blossom flower odor diluted 1:2 in saline was applied to a clean paper three times for 2 min, with one-minute intertrial intervals. The adhesive paste was changed after three applications of the blossom flower odor. Next, 20 μ L of sex-matched urine collected from several 4-7 weeks old WT males or females not included in the test and pooled from different cages to avoid any olfactory bias (estrous state) was applied three times for 2 min in the same way. The total time, number, and duration of sniffing each odor, as well as time spent immobile and self-grooming were measured.

Food localization test

A day before the test, pieces of a sweet butter cookie were placed in the cages of experimental mice to familiarize them with the odor of the cookie. The experimental mice were then starved overnight (approximately 16 hours). A piece of cookie (approximately 2 g) was buried underneath a 3 cm thick layer of litter in a clean conventional type 2 cage and each mouse was introduced

into the testing cage for 5 min. The latency to feed, defined as the time taken to dig out and bite a cookie, was measured.

Innate olfactory test

Experimental mice were tested in their home cage with two neutral odors (2-phenoxyethanol diluted 1:1000 in mineral oil and 3-nonanone diluted 1:10000 in mineral oil), one food odor (10% milk powder diluted in distilled water), and pure same-sex and opposite-sex urine that was collected from 10 WT mice not included in the test and pooled to avoid any olfactory bias. A piece of Whatman paper (2 cm x 2 cm) was glued to the home cage of the mice using the adhesive paste on the opposite side of the carton shelter and the mice were habituated to the paper for 5 min. The odors were then applied to the Whatman paper for 2 min as follows: 15 μ L of diluted 2-phenoxyethanol, 15 μ L of diluted 3-nonanone, 15 μ L of diluted milk, 5 μ L of male, and finally 5 μ L of female urine. The time between each trial was one minute and the adhesive paste was changed between odors. The total time, number, and duration of sniffing each odor were measured.

Olfactory avoidance test

Experimental mice were tested in their home cage with predator odors. A piece of Whatman paper (2 cm x 2 cm) was glued to the cage using the adhesive paste on the opposite side of the carton shelter, and the mice were habituated to the paper for 5 min. After habituation, 10 μ L of predator odor (a mixture of mountain lion, bobcat, fox, wolf, coyote, and marten's urines) was then applied to the Whatman paper, and total time, number, and duration of freezing, immobility and sniffing predator odors were measured for 15 min.

Memory

Spatial object location recognition test

Experimental mice were habituated two times for 10 min in the open field arena to two identical Lego Duplo toys taped at the border of the center area on the same side of the arena using adhesive paste. The interval between the two habituations was one and a half hours. Two hours after the last habituation, mice were tested for their spatial memory by placing them for 10 min in the open field arena where one Lego Duplo toy (called “old object”) was placed in the same position as in habituation, while the other toy (called “spatial object”) was moved to the other side of the center area, diagonal from the first object. The total time, mean duration of contact with the “old” and “spatial” object, and number of visits to each object were measured in the habituation and testing phases. From the total time in contact with the “old” and “spatial” object, the discrimination index was calculated as:

$$\text{discrimination index} = \frac{(\text{spatialObject_timeSpent} - \text{oldObject_timeSpent})}{(\text{spatialObject_timeSpent} + \text{oldObject_timeSpent})}$$

Novel object recognition test

Experimental mice were habituated two times for 10 min in the open field arena to the two identical Lego Duplo toys taped at the border of the center area on the same side of the arena using adhesive paste. The interval between the two habituations was one and a half hours. 24 hours later, experimental mice were placed in the open field arena for 10 min with one Lego Duplo toy from the habituation phase and a bigger Lego Duplo toy with a different color as a “novel” object. Both objects were placed in the same location like in the habituation phase. Two hours later, experimental mice were again placed in the open field arena for 10 min with a “novel” object from the previous phase and a Falcon tube replacing the Lego Duplo toy from the

habituation phase as the second “novel” object. Both objects were placed in the same location as in the previous testing phase. The total time, mean duration of contact, and number of visits to both objects in the habituation and testing phases were measured.

Spatial Y-maze memory test

One arm of the Y-maze was closed with the doors provided by the manufacturer. The experimental mice were placed in one opened arm of the maze and were habituated to the apparatus for 15 minutes. One hour after the habituation, all the doors of the Y-maze were opened, mice were placed again in the same arm of the maze as in the habituation phase and their spontaneous alternation was recorded for 5 minutes. The total amount of time, mean duration, number of entries to the arm of the maze closed in the habituation (“hidden arm”), and the total time spent immobile were measured.

Pup testing

Recording pups’ ultrasound vocalizations (USVs)

On PND 6, each pup from the litter was taken from its home cage and placed into an empty plastic container (11 x 7 x 3.5 cm), which was then positioned inside a homemade sound-attenuating isolation box (32 x 21 x 14 cm) made of cardboard. USVs were recorded for 4 min using an ultrasonic microphone (Ultramic UM250K, Dodotronic, Italy), placed 20 cm above the pup in its plastic container, and connected to the SeaWave software (SeaPro Package, <http://www-9.unipv.it/cibra/seawave.html>). The total amount of time, number, duration, frequency, and amplitude of USVs were automatically measured by USVSeg software ⁷.

Homing test

The homing test was performed as previously described⁸. Briefly, on PND 13, all pups from the litter were separated from their mother in a clean conventional type 2 cage and placed on a heating pad set at 35°C for 30 min. Each experimental pup was then moved to a type 2 cage which contained one-third of the litter from the pup's home cage (nest area) and two-thirds of the fresh litter (unfamiliar area), by placing it at the edge of the fresh litter, and its behavior was recorded for 5 min. The latency to reach the nest area by placing the front paws into it, the total amount of time, the number of visits, and the mean duration of visits to the nest area, as well as the time spent immobile, were measured.

Grasping reflex test

The grasping reflex was tested on PND7 by placing a cotton-tipped applicator close to each forepaw and hind paw of a pup. The score was given 0 if there was no grasping of the applicator with both forepaws and both hind paws, 1 if there was only one forepaw or one hind paw grasp, and 2 if the pup grasped the applicator with both forepaws and hind paws.

Righting reflex test

The righting reflex of the pups was assessed on PND7 by placing them on their backs and observing their ability to flip onto all four paws within 2 minutes. The time taken to fully right and achieve the correct posture was measured. If a pup did not fully right itself within the 2-minute test period, the full duration of the test was noted as the time spent to right.

Cliff avoidance test

Cliff avoidance was tested on PND7 by placing each pup near the edge of a table, gently nudging it toward the edge, and scoring avoidance. The score was given 0 if there were no movement or

falls, 1 if there were attempts to move from the cliff but with hanging limbs, and 2 if the pup successfully moved from the cliff.

Scoring

Scoring was conducted manually for the pup retrieval test, sociability, social novelty, and mate interaction phases of the three-chambered test, social recognition, homing, olfactory habituation/dishabituation, innate olfactory preference, olfactory avoidance, food localization, and motor stereotypy tests. Manual scoring was done *a posteriori* by a trained experimenter blinded to the genotypes by using the Behavioral Observation Research Interactive Software (BORIS) ⁹. For the spatial Y-maze, open-field, elevated plus maze, object location recognition, spatial Y-maze memory, and novel object recognition tests, scoring was conducted automatically using the automatic animal tracking ANY-maze software. The automatic ANY-maze software was configured to detect animal immobility using a 95% threshold sensitivity, animal entries in compartment or arms using 80% of the animal body (e.g., when 4 paws of the animals entered the chamber or arms in the three-chambered and Y-maze tests), and the mouse head for object interaction. For the pup reflexes testing, novelty-suppressed feeding, marble burying, and string tests, scoring was done in real-time by a trained experimenter not blinded to the genotypes. Behavioral criteria to exclude animals from behavioral tests were: over 30% of the time spent immobile and/or lack of exploration of all arms or compartments of the testing apparatus.

Quantitative PCR (qPCR)

Three-month-old WT, Neo⁺ KO1, and Neo⁻ KO1 dams and two-month-old naïve WT and Neo⁺ KO1 mice that underwent social interaction with unfamiliar conspecifics (SI condition) or stayed in

their home cages as basal controls (basal condition) were euthanized by cervical dislocation. Their brains were rapidly dissected, and 1 mm thick brain slices were prepared using a coronal mouse brain matrix. The prefrontal cortex (PFC), nucleus accumbens (NAC), caudate putamen (CPU), paraventricular (PVN), and supraoptic (SON) nuclei were collected using a 2 mm diameter puncher (two punches for lateralized regions) as described in ³ and immediately frozen until further use. After tissue homogenization using a polytron (Grosseron, France, PT1200E), total RNAs were extracted according to the Direct-zol™ RNA Microprep and Miniprep kit (ZymoResearch, Ozyme, France, R2063 and R2050, respectively) and quantified using ND2000 nanodrop (Thermo Fisher Scientific, France). The cDNAs were generated from 0.5 (2 punches) or 0.25 µg (1 punch) of total RNAs using the SensiFast reverse transcriptase kit (Ozyme-Bioline, BIO-65054) and quantitative PCR (qPCR) was performed in triplicates according to 2X ONE Green Fast qPCR premix (Ozyme, France, OZYA008-1000) with 1 µL of cDNA and 1 µM of each validated couple of primers (list of primers in **Table S6**). The following qPCR protocol was applied for 40 cycles: 95 °C for 5 s, 60 °C for 15 s, and 60 °C for 30 s.

Library Preparation and NovaSeq sequencing

Two-month-old naïve WT (N = 3), Neo⁺ KO1 (N = 4), and Neo⁻ KO1 (N = 3) female mice were euthanized by cervical dislocation 45 min after social interaction with their genotype-matched littermates in the LMT. Their brains were rapidly dissected, and 1 mm thick brain slices were prepared using a coronal mouse brain matrix. The PVN was collected using a 2 mm diameter puncher as previously described and immediately frozen until further use. After tissue homogenization using a polytron (Grosseron, France, PT1200E), total RNAs were extracted

according to the Direct-zol™ RNA Microprep kit (ZymoResearch, Ozyme, France, R2063) and quantified using ND2000 nanodrop (Thermo Fisher Scientific, France) and Qubit 4.0 Fluorometer (Life Technologies, Carlsbad, CA, USA). RNA integrity was checked with RNA Kit on Agilent 5300 Fragment Analyzer (Agilent Technologies, Palo Alto, CA, USA). RNA quantity and integrity were comprised between 174 to 1086 ng, 5.8 to 36.3ng/μL, RQN 5.1 to 10 for the 10 samples.

RNA sequencing library preparation was performed at Genewiz-Azenta using NEBNext Ultra II Directional RNA Library Prep Kit for Illumina by following the manufacturer's recommendations (NEB, Ipswich, MA, USA). Briefly, mRNAs were first enriched with Oligo(dT) beads. Enriched mRNAs were fragmented for 15 minutes at 94 °C. First strand and second strand cDNAs were subsequently synthesized. The second strand of cDNA was marked by incorporating dUTP during the synthesis. cDNA fragments were end repaired and adenylated at 3'ends, and universal adapters were ligated to cDNA fragments, followed by index addition and library enrichment by limited- cycle PCR. The incorporated dUTP in second strand cDNA quenched the amplification of second strand, which helped to preserve the strand specificity. Sequencing libraries were validated using NGS Kit on the Agilent 5300 Fragment Analyzer (Agilent Technologies, Palo Alto, CA, USA), and quantified by using Qubit 4.0 Fluorometer (Invitrogen, Carlsbad, CA).

The sequencing libraries were multiplexed and loaded on the flow cell of the Illumina NovaSeq X plus instrument according to manufacturer's instructions at Genewiz-Azenta. The samples were sequenced using a 2x150 Pair-End (PE) configuration v1.5 with 20 million guaranteed paired-end reads per sample (20.5 to 52.9M for the 10 samples). Image analysis and base calling were conducted by the NovaSeq Control Software v1.7 on the NovaSeq instrument. Raw sequence data (.bcl files) generated from Illumina NovaSeq was converted into fastq files and de-multiplexed

using Illumina bcl2fastq program version 2.20. One mismatch was allowed for index sequence identification.

Read analysis was conducted using the nfcore/RNASeq pipeline (<https://nf-co.re/rnaseq/>, version 3.22.1). Following quality and adapter trimming with trim_galore, the reads were mapped to the GRCm39 mouse reference genome (GCA_000001635.9) using STAR ¹⁰. Various tools are integrated into this pipeline, including RSeQC, QualiMap, and dupRadar, for sample quality verification and mapping assessment. Transcripts were identified by geneID using the gene transfer format, and the number of reads for each mRNA were quantified using the SALMON software tool ¹¹. The DESeq2 R package ¹² was used for normalizing gene expressions and identifying differentially expressed transcripts among the experimental conditions. Based on PCA analysis, one Neo⁺ KO1 sample (with the lowest total RNA quantity) differed from the other samples and thus was excluded from analysis, reaching n = 3 per genotype. We compared WT and Neo⁻ KO1 vs. Neo⁺ KO1 mice to identify transcripts differentially regulated due the Neo expression, as well as Neo⁻ KO1 and Neo⁺ KO1 vs. WT mice to identify transcripts differentially regulated due *Arc/Arg3.1* deletion. To visualize and analyze those transcripts, we used Volcano plot (ggplot2), heatmap (pheatmap R ¹³), gene ontology (gprofiler2 ¹⁴, STRINGdb ^{15,16} et rbioapi ^{17,18} R package), through literature mining and autism ([AutDB](http://autism.mindspec.org/autdb/Welcome.do) at <http://autism.mindspec.org/autdb/Welcome.do> and SFARI gene at <https://gene.sfari.org/>) and schizophrenia (<http://szdb.org/>) databases. For STRING network analysis, background genes (*e.g.*, the total number of genes expressed in the PVN with baseMean>20) were imputed to the network of the dysregulated genes (baseMean>20). Among our dysregulated genes *Atp6v0c-ps2*, was annotated as a pseudogene to which STRING cannot assign a protein. After conversion using

Muscle and EMBOSS TRANSEQ, followed by alignment with Clustal Omega, *Atp6v0c-ps2* protein sequence is identical to *Atp6v0c*. Therefore, we included it in our protein network and this pseudogene is probably an alternate transcript variant. For the entire STRING analysis, a score threshold of 500 was established. We used the R packages *rbioapi*^{17,18} and *STRINGdb*^{15,16} for network construction, image generation, and enrichment. For the protein network, we requested the addition of 45 proteins, which will then be filtered to retain only those present in the background.

***Arc/Arg3.1* genomic environment exploration**

The three-dimensional genomic environment *interaction* of the murine *Arc/Arg3.1* gene and its topologically associated domain (TAD) was explored using the single-cell Hi-C data from all neuronal subtypes available in the 3D Genome Browser dataset¹⁹. This browser using cortical pyramidal neurons from layers 2/5 (**Figure S11**) and 6, hippocampal granule and pyramidal neurons, interneurons, medium spiny neurons, and neonatal neurons, enables visualization of similar TADs of chromosome 15, as well as similar interactions between short- and long-distance genomic regions that are in close three-dimensional nuclear proximity regardless of their linear chromosomal distance. The chromatin interactions on chromosome 15 were visualized in the region from approximately 73250-75000 kb. The Neo cassette in *Arc/Arg3.1* gene is located in a small topologically associating domain (TAD) on murine chromosome 15, and thus unlikely to cause major gene expression effects.

Western blot

Two-month-old WT, Neo⁺ KO1, and Neo⁻ KO1 naïve mice that previously underwent behavioral assays were euthanized by cervical dislocation. Their brains were rapidly dissected, and 1 mm thick brain slices were prepared using a coronal mouse brain matrix. The olfactory bulbs (OB) were directly dissected, while PVN was collected using a 2 mm diameter puncher, as previously described and immediately frozen until further use. The brain tissues were placed in 20 μ L of Radio-Immunoprecipitation Assay buffer (RIPA buffer, 50 mM Tris HCl pH=7.4, 150 mM NaCl, 1% Igepal CA-630 (Sigma-Aldrich, USA, I3021), 1% HaltTM protease and phosphatase inhibitor cocktail (Thermo Fisher Scientific, France, 78429), 1 μ M PMSF), homogenized by sonication 2 times for 20 seconds, and centrifuged at 10000 g for 10 minutes. Supernatants were collected and protein concentration was determined using the Bradford assay (Bio-Rad Protein Assay Dye Reagent Concentrate, Bio-Rad Laboratories, USA, 5000006).

The Human Embryonic Kidney 293 cell line (HEK293A) was cultivated in DMEM without phenol red supplemented with 10% heat-inactivated fetal bovine serum and 1% penicillin. The cells were plated in 6-well cell culture plates at concentration 5×10^5 cells/well and transfected with 5.5 ng/1 kb of Neo⁺ pcDNA3.1 plasmid and Neo⁻ pUC19 control plasmid using Metafectene PRO (Biontex, Germany, T020-1.0) following the manufacturer's protocol. Two days after the transfections, cells were starved overnight by changing their culture medium to DMEM without phenol red and serum, or their medium was changed to fresh. Five independent experiments were performed with two biological replicates in each experiment. The cellular lysates were harvested in 150 μ L of RIPA buffer, frozen at -20°C, thawed, homogenized by sonication 2 times for 20 seconds, and centrifuged at 10000 g for 10 minutes. Supernatants were collected and

protein concentration was determined using the Bradford assay (Bio-Rad Protein Assay Dye Reagent Concentrate, Bio-Rad Laboratories, USA, 5000006).

40 µg of each sample were mixed with Laemli SDS Reducing Sample Buffer (Thermo Fisher Scientific, France, J61337.AC), heated at 85°C for 10 minutes, separated by SDS-PAGE electrophoresis and transferred to a nitrocellulose membrane (Trans-Blot Turbo RTA Transfer Kit Nitrocellulose, Bio-Rad Laboratories, USA, 1704271) using the Trans-Blot Turbo Transfer System (Bio-Rad Laboratories, USA, 1704150). Membranes were briefly stained with 0.1% Ponceau stain, de-colored in distilled water, blocked in 5% milk in Tris Buffered Saline with 0.1% Tween® 20 (TBS-T; Sigma-Aldrich, USA, P1379) for one hour at room temperature (RT) and then incubated with mouse anti-p44/42 MAPK (ERK1/2) (1:1000; monoclonal to p44/42 MAPK, Cell Signaling Technology, USA, #9107) and rabbit anti-phospho-p44/42 MAPK (ERK1/2) (1:2000; monoclonal to phospho-p44/42 MAPK (Thr202/Tyr204), Cell Signaling Technology, USA, #4370) primary antibodies for both PVN tissue and HEK293 cell lysate samples, or mouse anti-S6 (1:1000; monoclonal to S6, Cell Signaling Technology, USA, #2317) and rabbit anti-phospho-S6 (1:2000; monoclonal to phospho-S6 (Ser235/236), Cell Signaling Technology, USA, #4858) primary antibodies for HEK293 samples, or rabbit anti-Arc/Arg3.1 (1:1000; monoclonal to Arc/Arg3.1, Abcam, USA, ab183183) primary antibody for brain tissue samples only overnight at 4°C. Membranes were washed (3 x 10 minutes) in TBS-T and incubated for one hour with goat anti-mouse IRDye®680CW (1:15000; LI-COR®, Lincoln, USA, 926-68070) and anti-rabbit IRDye®800CW (1:15000; LI-COR®, Lincoln, USA, 926-3221) secondary antibodies in TBS-T with 5% milk at RT. Finally, blots were washed (3 x 10 minutes) in TBS-T and visualized by the Odyssey CLx Imager (LI-COR Biosciences, USA, 9140). After visualization, membranes were briefly washed in distilled

water, stripped in 0.2 M NaOH for 10 min at RT, washed in distilled water until the pH returned to neutral, blocked again as previously described, and incubated with rabbit anti-GAPDH (1:15000; polyclonal, Proteintech, USA, 10494-1-AP), or rabbit anti-aminoglycoside phosphotransferase (Neo product) (1:150, rabbit polyclonal to Neomycin phosphotransferase II, Sigma-Aldrich, USA, #06-747) primary antibodies overnight at 4°C. Finally, membranes were washed as described and incubated with goat anti-rabbit IRDye®680CW (1:15000; LI-COR®, Lincoln, USA, 926-68070) secondary antibody following the previously described procedure. All the blots were analyzed and quantified in ImageJ using the Gel Analysis plugin²⁰. ERK1/2 and S6 protein levels were normalized to GAPDH protein levels, while phospho-ERK1/2 and phospho-S6 levels were normalized to total ERK1/2 or S6 protein levels. For the experiments with HEK293 cell lysate samples, protein levels of pERK, ERK1/2, S6, and pS6 in biological replicates from each experiment were averaged, and all the data from the same experiment were normalized to the samples from pUC19 starved conditions as a control for interblot normalization. For the PVN and OB lysate samples, pERK and ERK1/2 levels were normalized to the same control WT sample present on each blot prepared by mixing aliquots of both male and female WT samples from the PVN.

The images of all blots used for quantification and the raw quantification data are available at <https://doi.org/10.5281/zenodo.20589372>.

Immunohistochemistry

The brains for immunostaining were collected from dams on postnatal day 14 that were anesthetized by a mix of 100 mg/kg ketamine and 5 mg/kg xylazine, while their pups were

euthanized by guillotine. Dams were perfused transcardially with 0.1 M PBS followed by cold 0.1 M PBS containing 4% paraformaldehyde (PFA). Brains were removed, post-fixed overnight in 4% PFA, and cryoprotected in 0.1 M PBS containing 30% sucrose. After the brains sank in sucrose solution, they were snap-frozen in cold isopentane (temperature between -20°C and -30°C) and kept at -80°C until further processing. The frozen brains were embedded separately in the Tissue-Tek O.C.T. compound and cut into 30 µm-thick slices on a CryoStar NX70 cryostat (MM France, France, 957060). The brain sections were kept in PBS containing 0.1% sodium azide until immunostaining.

The snouts for immunostaining were collected from two-month-old naïve WT and *Neo⁺ Arc/Arg3.1^{+/-}* females that had previously undergone behavioral assays. The females were anesthetized by a mix of 100 mg/kg ketamine and 5 mg/kg xylazine and perfused transcardially with 0.1 M PBS, followed by cold 0.1 M PBS containing 4% PFA. Snouts were removed, post-fixed overnight in 4% PFA. at 4°C. Fixed snouts were quickly rinsed in PBS to remove residual fixative and then immersed in TBD-1 Rapid Decalcifier (Thermo Fisher Scientific) at room temperature for 20 min. The decalcified snouts were rinsed 3 times with PBS and then incubated overnight in a cryoprotective solution (30% sucrose, 50% Tissue-Tek OCT compound) at 4°C. The following day, the snouts were embedded in Tissue-Tek OCT compound and snap-frozen in isopentane cooled to -40 °C. Cryosections of 14 µm thickness were cut using a CryoStar NX70 cryostat (MM France, France, 957060), mounted directly onto SuperFrost™ Plus Adhesion microscope slides (Epredia), and stored at -80 °C until use.

Sections were washed (1 × 15 min) in PBS with shaking (150 rpm) and then blocked for one hour at room temperature in PBS containing 10% natural goat serum, 0.4% Triton, and 10 mg/mL

bovine serum albumin (BSA). After blocking, the sections were incubated in the blocking solution supplemented with oxytocin primary antibody (1:500, rabbit monoclonal [EPR20973] to oxytocin-neurophysin 1, Abcam, USA, ab212193), aminoglycoside phosphotransferase (Neo product) primary antibody (1:150, rabbit polyclonal to Neomycin phosphotransferase II, Sigma-Aldrich, USA, #06-747), or oxytocin and Arc/Arg3.1 primary antibodies (rabbit polyclonal to oxytocin, Phoenix Pharmaceutical, USA, #G-051-01; mouse monoclonal [1G4B5] to Arc/Arg3.1, Proteintech, USA, #66550-1-Ig) and incubated overnight at 4°C. Sections were washed (3 x 15 min) in PBS with shaking (150 rpm) after which they were incubated with PBS containing 10 mg/mL BSA supplemented with secondary antibodies (1:500, Cy3-conjugated goat anti-rabbit IgG, Jackson ImmunoResearch, USA, lot #150960 for oxytocin and Neo product immunolabeling, or 1:400, goat anti-mouse IgG 568nm, Abcam, USA, ab175473 and 1:200, goat anti-Rabbit IgG 488nm, Abcam, USA, ab150077 for Arc/Arg3.1 and OT co-staining) and Hoechst B2261 (1:1000, Sigma-Aldrich, USA, 14533) for one hour at room temperature with shaking (150 rpm). Samples were washed (3 x 15 min) in PBS with shaking (150 rpm) and mounted on Superfrost Plus adhesion microscope slides (Epredia, USA, J1800AMNZ) with Immu-Mount mounting medium (Epredia, USA, 9990412).

Image acquisition and analysis

For the oxytocin immunolabeling, images of all fluorescent-labeled sections were acquired using a 20x objective and Zeiss Axioscan Z1 (Carl Zeiss Microscopy, Germany). The lamp settings were kept the same during the acquisition of all images, with lamp intensity set at 30% and exposure time at 11.5 ms for Hoechst, lamp intensity at 15% and exposure time at 40 ms for Cy3. To improve the quality of the image, three images were taken along the z-axis with 11 µm range and averaged to obtain the final images used for quantitative analyses. The image analysis of oxytocin

immunolabeling was performed using QuPath software ²¹. The number of oxytocinergic neurons was determined in the PVN and SON along the anterior-posterior axis, while the number, fluorescence intensity, and density of oxytocin fibers were determined in the projection areas of the oxytocinergic neurons (PFC, NAC, CPU, MPOA, BNST). The number of oxytocinergic neurons for each dam was determined by averaging the number in the two hemispheres and, as the number of neurons did not show differences between genotypes along the anterior-posterior axis of the PVN and SON, one specific coordinate with the highest number of slices for each dam was chosen (bregma -0.94) and the number of oxytocinergic neurons for this coordinate was averaged to get one final value per dam. For the fibre quantification, one specific coordinate with the lowest variability of fiber density was chosen in the NAC (bregma 0.86) and PFC (1.78), and the values were first averaged for the two hemispheres on the same slice, and then the values for all the slices were averaged to get one value per dam.

For Neo product immunolabeling, images for all fluorescent-labelled sections were acquired using a 20x objective with 0.8 numerical aperture and Zeiss inverted Axio Observer Z1 confocal microscope (Carl Zeiss Microscopy, Germany). The ranges of lasers were adjusted to avoid overlapping of signals from different fluorophores, with 405 nm laser detecting Hoechst B2261 signal in the range 410-471 nm and 561 nm laser detecting Cy3 signal in the range 565-620 nm. The laser settings were kept the same during the acquisition of all images, with the laser power at 2.0, master gain at 750, and pinhole opening of one airy unit for both lasers. Qualitative image analysis of Neo product immunolabeling was performed in Fiji ²⁰.

Representative images used for quantitative analysis of oxytocin and qualitative analysis of Neo product immunolabelling are available at <https://doi.org/10.5281/zenodo.20589372>.

Chronic oxytocin treatment

One week before starting the treatment, WT and Neo⁺ KO1 mice were implanted with RFID transponders for automatic chip detection in the Live Mouse Tracker (LMT), as detailed in ⁴. A solution of 20 µg/kg (0.3 IU) oxytocin was prepared by diluting 1 mg of ≥95% oxytocin corresponding to 600 IU (OT; Tocris Bioscience, USA, batch 16A/276657) in sterile saline (NaCl 0.9%). Aliquots of 250 µL of diluted oxytocin (OT) and saline (SAL) were stored at -20°C and on each treatment day, a fresh aliquot of OT and SAL was thawed. Mice were weighed on the first day of treatment and every 3-4 days thereafter to adjust the OT or SAL dosage accordingly. OT or SAL was administered intranasally every day for 28 days. Half of the dose was delivered into one nostril, allowing the mouse to inhale it, followed by the other half into the opposite nostril. Injections were given in the morning in a quiet room separate from the testing room, except on days 0, 7, 14, 21, and 28. On these days, injections were given in the experimental room, and 15 minutes later, the mice were subjected to social interaction in the LMT with up to four unfamiliar, age-, sex-, and treatment-matched congeners as previously described to evaluate the effect of OT treatment on social interaction.

Statistical analysis

All data and statistical analyses were performed using R software (version 4.3.1). Animal outliers (± 2 standard deviations) were removed from the qPCR dataset (two WT females from two different experimental cohorts), while for behavior, females from one cohort tested in maternal behavior assays were excluded due to the abnormal behavior of the WT (increased jumping while

manipulating, increased self-grooming and immobility displayed in different behavior assays compared to WT from other experimental cohorts). For qPCR after maternal behavior assays, batch corrections were applied using the ComBat sva package²². The behavior of WT from distinct experimental cohorts tested in the three-chambered, object location recognition, motor stereotypy tests, and the Live Mouse Tracker remained consistent and did not require correction, so the data from WT mice from different cohorts were pooled together. For comparisons between groups, the Kruskal-Wallis tests with Dunn's posthoc tests were performed using the rstatix package²³. P-values were adjusted with Benjamini-Hochberg correction²⁴. For the pup retrieval test, comparisons of retrieval latencies between groups were conducted by the Kaplan-Meier test from the survminer package²⁵, and the percentage of females retrieving pups, as well as pup reflex scores between groups was compared by the Fisher's test using the ggstatsplot package²⁶. Furthermore, the integration of qPCR and maternal behavior data was performed using DIABLO (Multiblock (s)PLS-DA) implemented in the mixOmics package²⁷. The compromise parameter was set at 0.8 for data obtained in dams and at 0.75 for data obtained in naïve mice to maximize the correlation between qPCR and behavioral datasets. The probability of error level (alpha) was set at 0.05. Raw data are available at <https://doi.org/10.5281/zenodo.15607567>, while mean \pm standard deviation (sd), and statistics are represented in **Tables S1-S5**.

SUPPLEMENTARY FIGURES

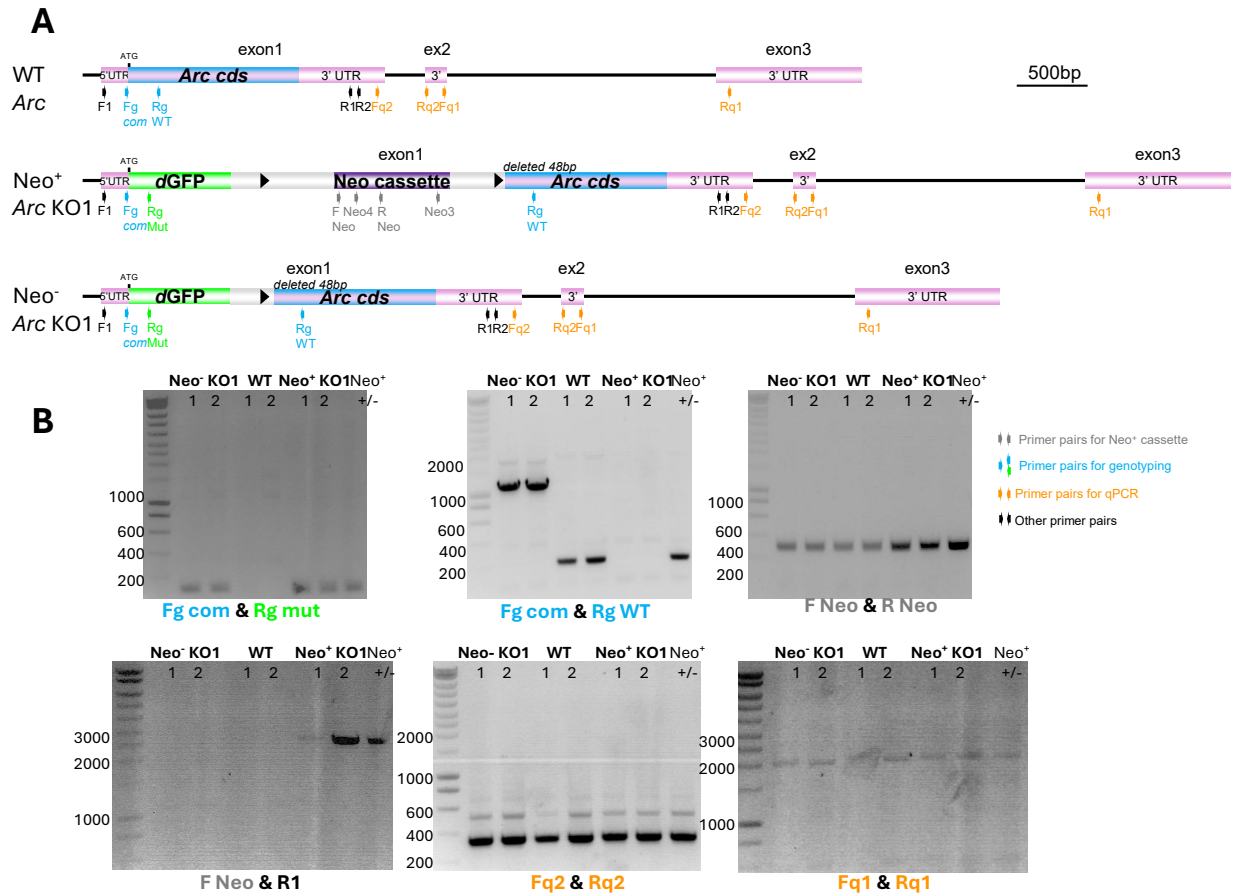


Figure S1. Arc/Arg3.1 gene, Neomycin cassette and KO1 construct

Mus musculus activity regulated cytoskeletal-associated protein (Arc) gene is reversely located at chromosome 15 (NC_000081.7, reference GRCm39 C57BL/6J) and encodes two Arc mRNA isoforms (NM_018790.3 sharing 99,9% homology with NM_001276684.1) and one Arc coding sequence (cds) and protein, located in exon1. Neo⁺ KO1 mice were generated by inserting the destabilized d2EGFP and Neomycin cassette (F Neo and R Neo primers amplify a non-specific band at the same size than Neo) flanked by Flox sites, at the ATG start codon of Arc cds, thus truncating 48bp of Arc cds through homologous recombination (Wang, 2006; **A**). Using distinct primers and Sanger sequencing on genomic DNA, we identified and detailed the exact sequence of Neo⁺ KO1 constructs and Neo⁻ KO1 mice after Cre recombination (sequence in supplementary materials and methods; **B**). Arc/Arg3.1, activity regulated cytoskeletal-associated protein or activity-regulated gene of 3.1 kilobases; cds, coding sequence.

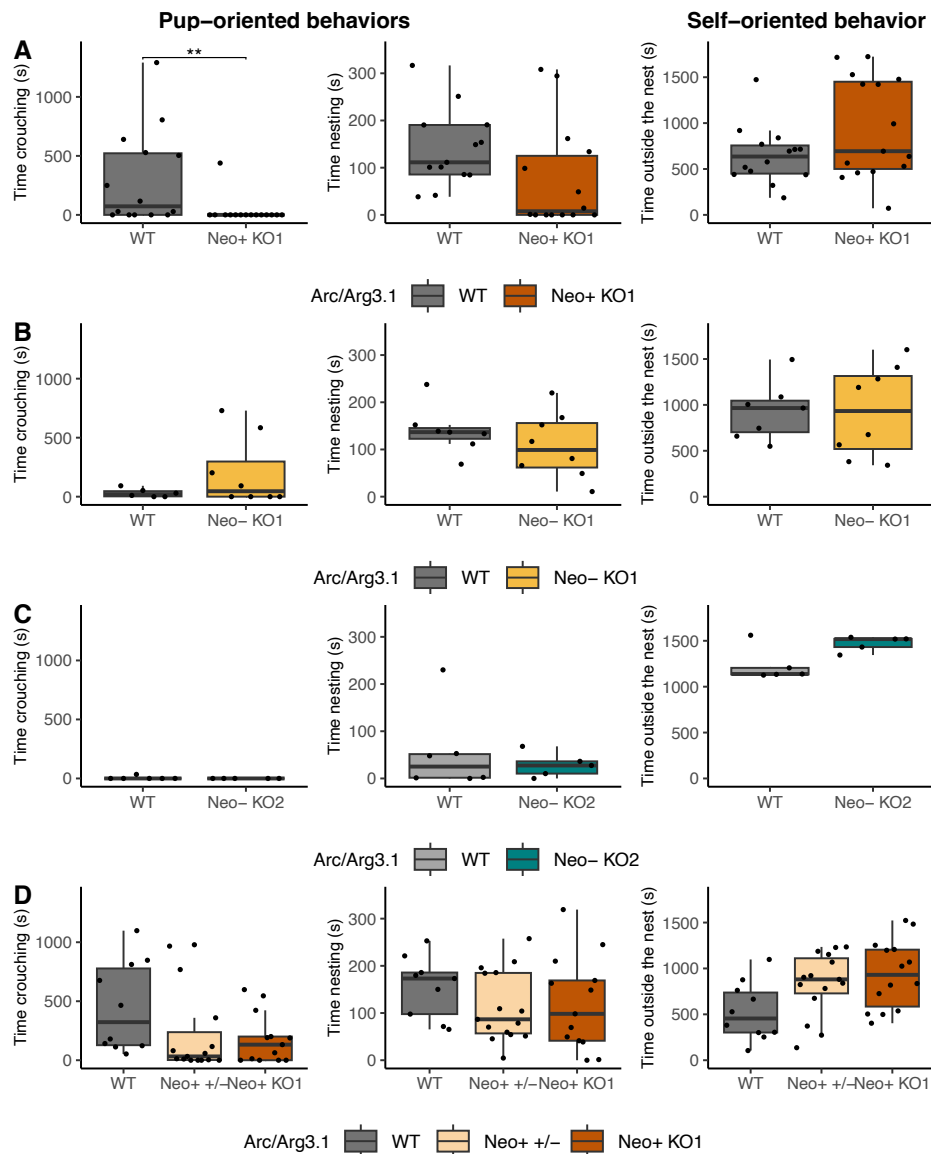


Figure S2. Neo^+ *Arc/Arg3.1*-deficient dams display maternal care impairments

In the pup retrieval test with their genotype-matched pups, Neo^+ KO1 dams of the first *Arc/Arg3.1* line (brown; $n = 15$) spent significantly less time crouching over the pups, and nesting compared to WT (dark gray; $n = 14$), with comparable time spent outside of the nest between genotypes (**A**). Neo^- KO1 dams (yellow; $n = 8$) showed no difference in the time spent crouching over the pups, nesting, or outside the nest compared to WT (dark gray; $n = 7$; **B**). Similarly, Neo^- KO2 dams from the second *Arc/Arg3.1* line (turquoise; $n = 5$) showed no difference compared to WT (pale gray; $n = 6$; **C**). In the pup retrieval test with Neo^+ *Arc/Arg3.1*^{+/-} pups, both Neo^+ *Arc/Arg3.1*^{+/-} (beige; $n = 15$) and Neo^+ KO1 dams (brown; $n = 14$) spent less time crouching over the pups and nesting, and more time outside the nest compared to WT (dark gray; $n = 10$; **D**). Data are presented as mean \pm sd in **Table S1**. All groups were compared by Kruskal-Wallis test followed by Dunn's post-hoc test, with an asterisk indicating genotype effects ($p = P$ adjusted). * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

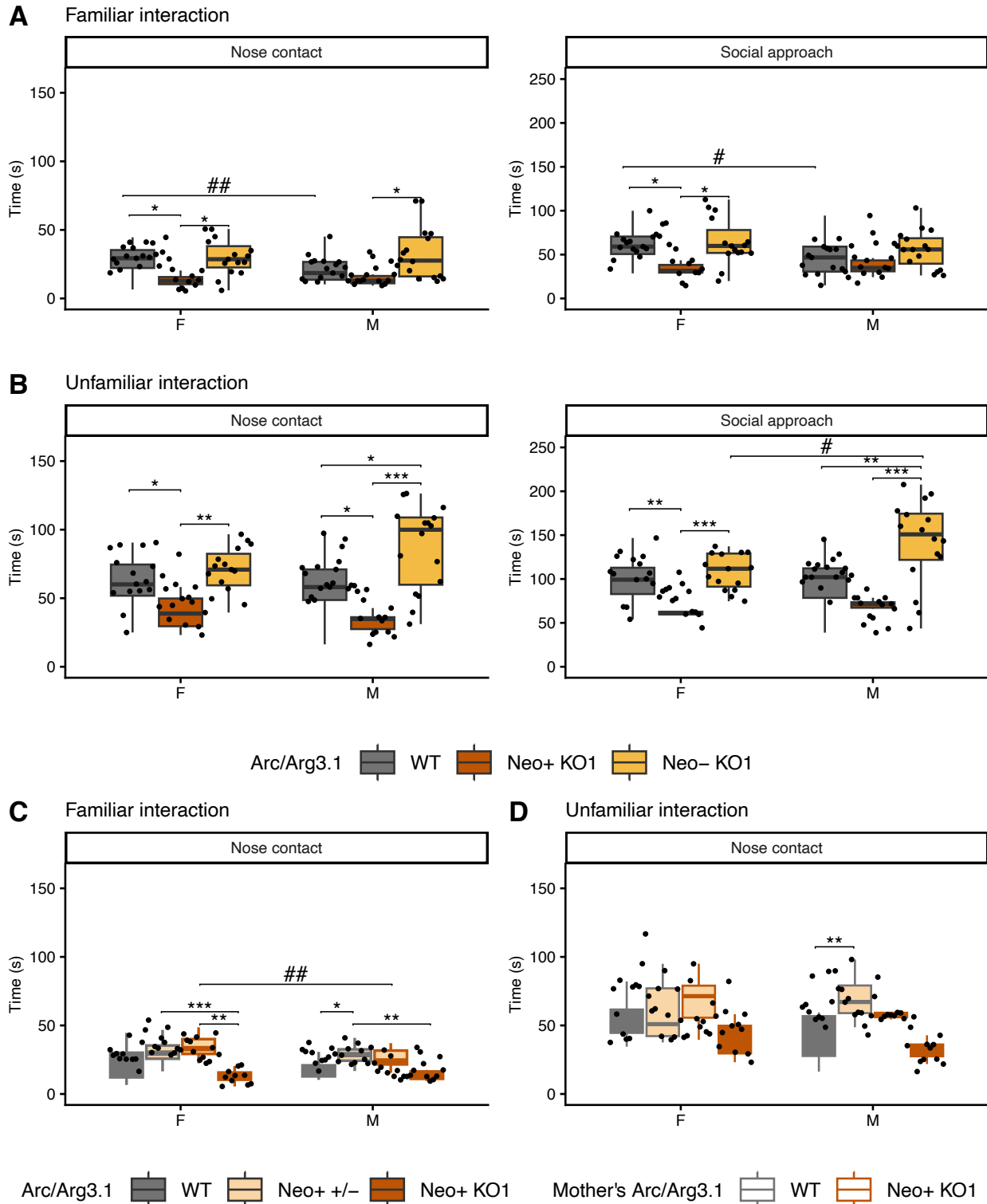


Figure S3. Social interaction impairments are more pronounced in Neo⁺ KO1 females than males

In the LMT, when interacting with genotype-matched cage mates, Neo⁺ KO1 females (brown; n = 6) displayed significantly reduced time in nose contact and social approach compared to WT

females (dark gray; n = 23), while Neo⁻ KO1 females (yellow; n = 15), Neo⁺ *Arc/Arg3.1* KO1 (brown; n = 6) and Neo⁻ KO1 males (yellow; n = 16) displayed no difference compared to WT (dark gray; n = 25 males; **A**). When interacting with unfamiliar conspecifics, both Neo⁺ KO1 females and males showed significantly decreased time in nose contact, while only females spent less time in social approach compared to WT. In contrast, Neo⁻ KO1 males showed increased time in nose contact and social approach compared to WT males, and increased time in social approach compared to Neo⁻ KO1 females (**B**). Neo⁺ *Arc/Arg3.1*^{+/-} males or females raised by either WT (beige with dark gray outline; n = 32, 16 females and 16 males) or Neo⁺ KO1 dams (beige with brown outline; n = 27, 15 females and 12 males) showed no impairments in social interaction with their genotype-matched cage mates compared to WT (dark gray; n = 18, 8 females and 10 males), while Neo⁺ KO1 control mice (brown; n = 12, 6 females and 6 males) showed reduced social interaction compared to WT (**C**). No difference in social interaction with unfamiliar conspecifics was observed between Neo⁺ *Arc/Arg3.1*^{+/-} mice raised by Neo⁺ KO1 or WT dams, while Neo⁺ KO1 controls showed reduced social interaction compared to WT (**D**). Data are presented as mean ± sd in **Table S2**. All groups were compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, with an asterisk indicating genotype effects and ladder sex effects (p = P adjusted). * or # p < 0.05; ** or ## p < 0.01; *** or ### p < 0.001.

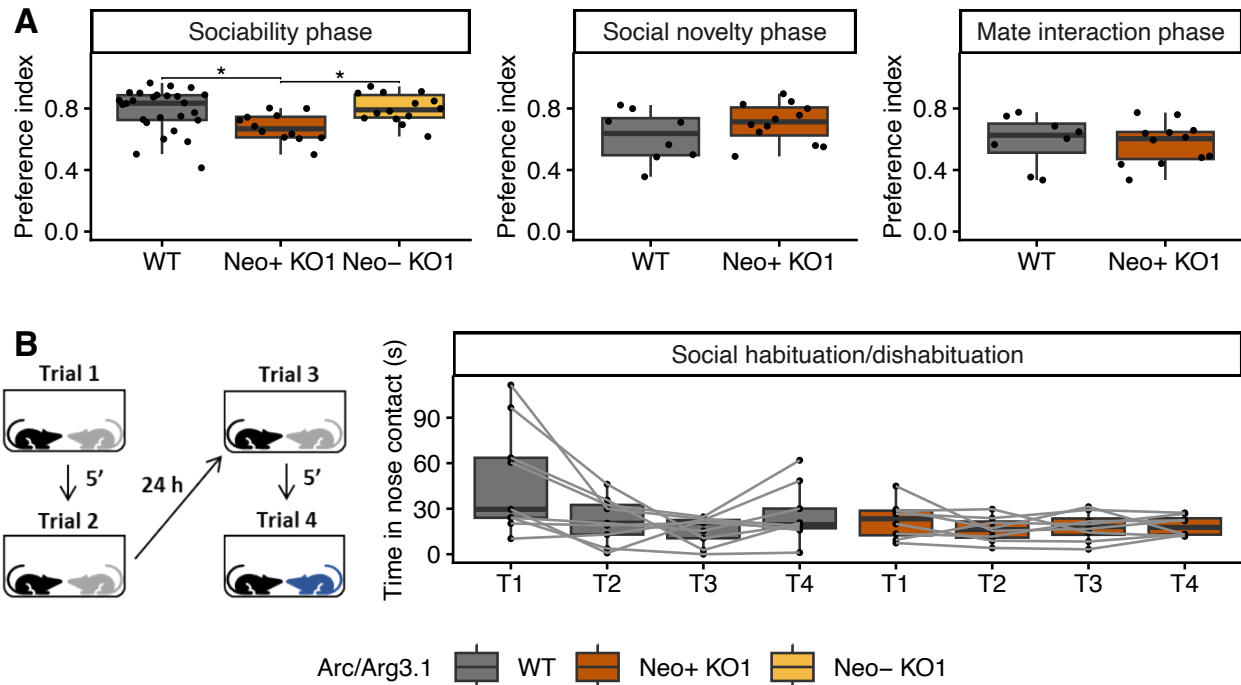


Figure S4. Neo⁺ KO1 mice display social deficits, rather than social memory impairments

In the three-chambered test, Neo⁺ KO1 mice (brown; n = 6 females and 6 males) showed reduced sociability preference index and no difference in the social novelty or cage mate preference index compared to WT (dark gray; n = 4 females and 4 males; **A**). In the social recognition test depicted in the scheme, WT mice (n = 4 females and 5 males) displayed habituation to the unfamiliar WT interactor over the first three trials, whereas Neo⁺ KO1 mice (n = 4 females and 4 males) did not, due to low time in nose contact with the interactor already in the first trial (**B**). Data are presented as mean ± sd in **Table S1**. All groups were compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, with an asterisk indicating genotype effects (p = P adjusted). * p < 0.05; ** p < 0.01; *** p < 0.001.

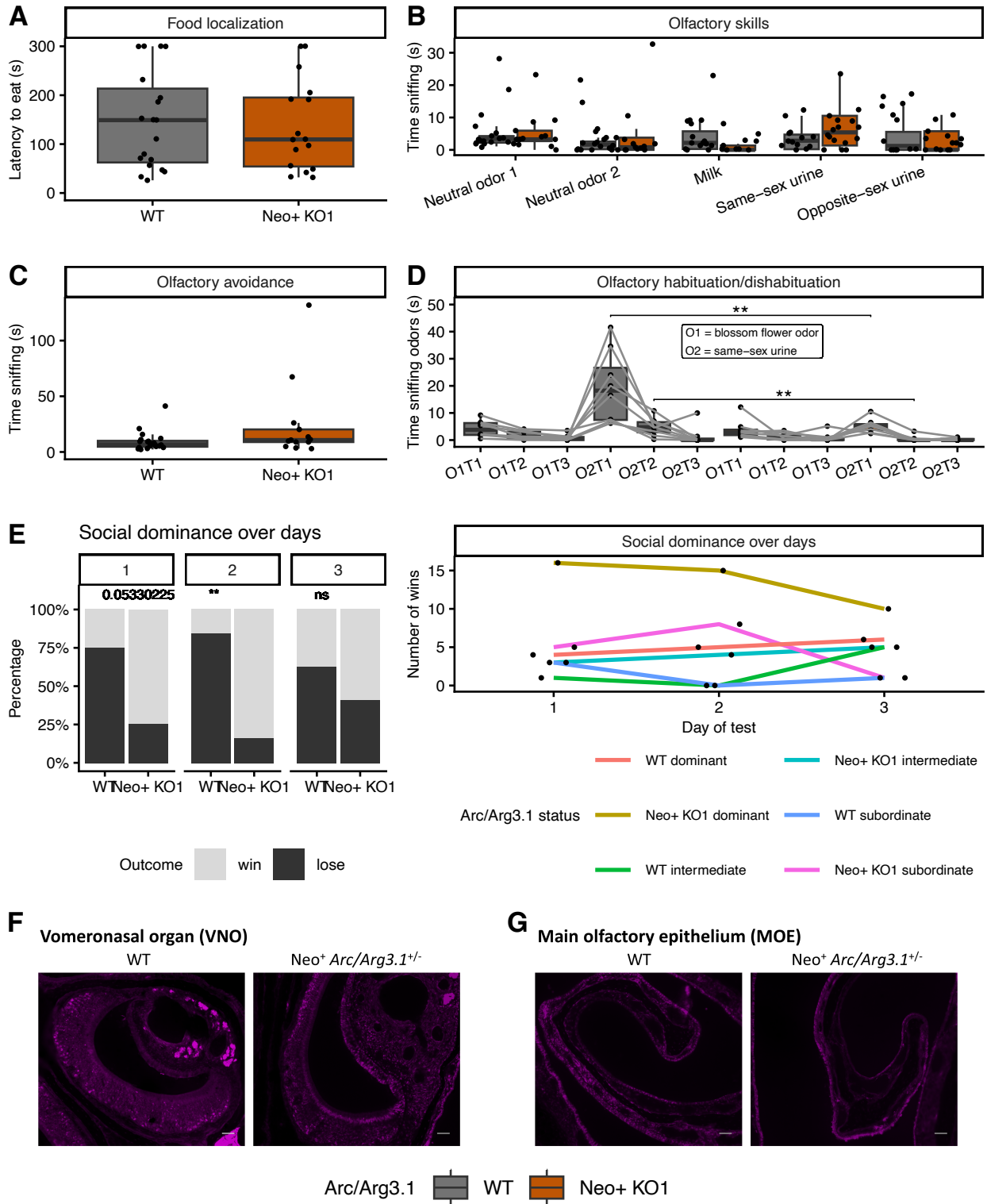


Figure S5. Neo⁺ KO1 mice display olfactory impairments only with social odors

In the food localization test, Neo⁺ KO1 mice (brown; n = 12 females and 4 males) displayed no difference in the latency to eat compared to WT (dark gray; n = 7 females and 12 males) (A). In the innate olfactory preference test, Neo⁺ KO1 mice (brown; n = 9 females and 4 males) showed

no difference in the time sniffing both neutral odors 2-phenoxyethanol (O1) and 3-nonanone (O2), milk food odor (O3), or social odors (same-sex O4 and opposite-sex urine O5) compared to WT (dark gray; n = 10 females and 10 males) (B). In the olfactory avoidance test, Neo⁺ KO1 mice (brown; n = 19 females and 4 males) displayed no difference in the time sniffing predator odors compared to WT (dark gray; n = 10 females and 10 males) (C). In the olfactory habituation/dishabituation test, Neo⁺ KO1 mice (brown; n = 4 females and 4 males) showed reduced time sniffing social odor (same-sex urine (O2)), while the time sniffing non-social odor (blossom flower odor opposite-sex urine (O1) and habituation over the three trials to both odors was comparable to WT (dark gray; n = 4 females and 4 males) (D). In the social dominance test, Neo⁺ KO1 mice (n = 8 females and 8 males) won in more trials than WT mice (n = 8 females and 8 males) over the three days of the test since Neo⁺ KO1 mice dominant (ochre), intermediate (turquoise) and subordinate (pink) in their home cage were winning more over dominant (salmon), intermediate (green) and subordinate (blue) WT mice (E). Neo protein product was not detected in the olfactory structures, including the VNO (F) and MOE (G) in Neo⁺ Arc/Arg3.1^{+/-} mice. Data are presented as mean ± sd in Table S1. Groups in A-D were compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, or by Fisher's exact test in E (left) with an asterisk indicating genotype effects (p = P adjusted). * p < 0.05; ** p < 0.01; *** p < 0.001; ns, not significant. OB, olfactory bulb; VNO, vomeronasal organ; MOE, main olfactory epithelium.

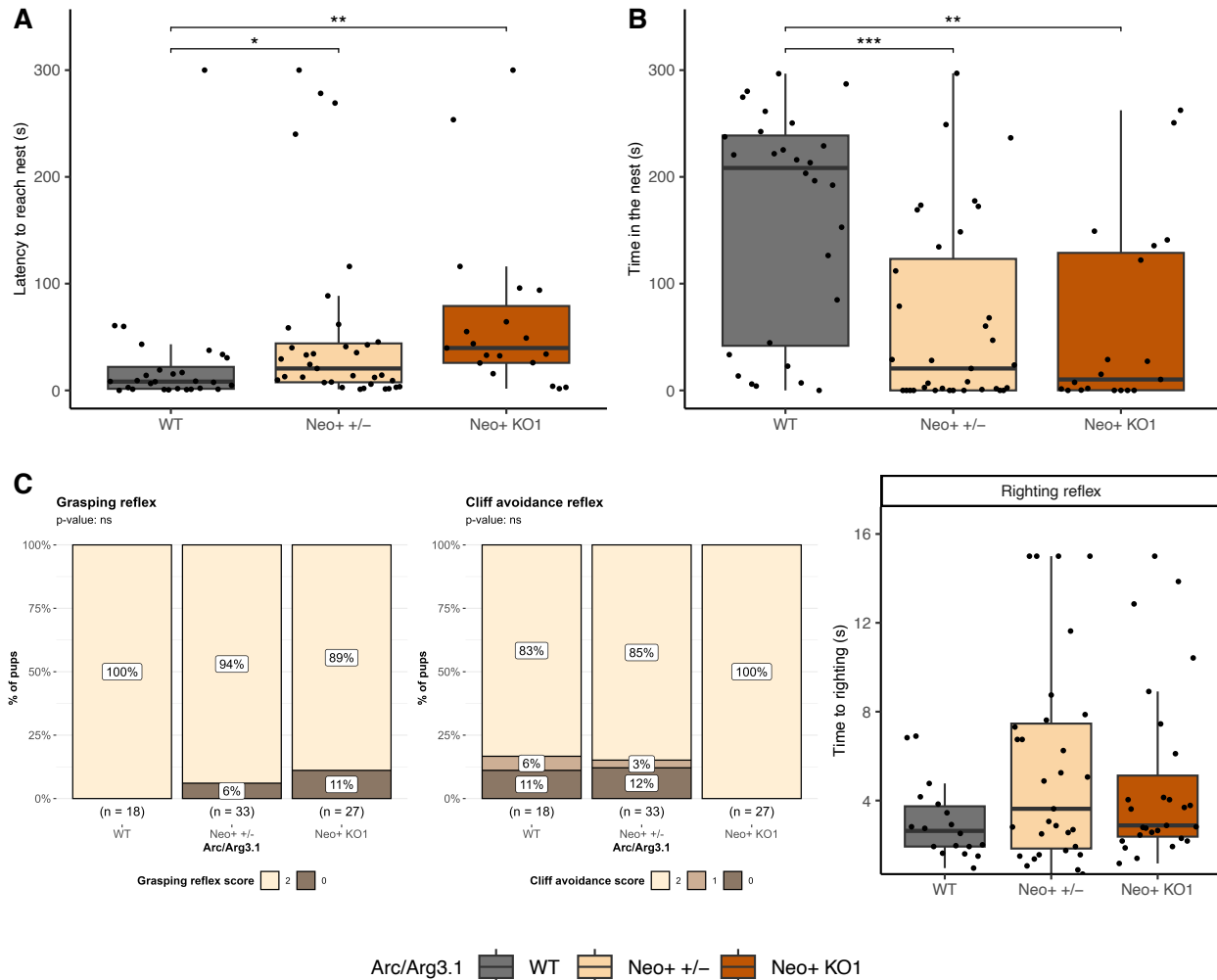


Figure S6. Neo⁺ KO1 pups exhibit social communication impairments, but no motor deficits

In the olfactory-based homing test, Neo⁺ KO1 (brown; n = 19) and Neo⁺ *Arc/Arg3.1*^{+/-} pups (beige; n = 35) showed significantly increased latency to reach the “nest area” (litter from their home cage) (A) and spend less time in it compared to WT (dark gray; n = 28) pups (B). When testing their reflexes, Neo⁺ KO1 (n = 27) and Neo⁺ *Arc/Arg3.1*^{+/-} pups (n = 33) displayed no difference in the grasping reflex, cliff avoidance reflex, or time to righting compared to WT pups (n = 18) (C). Data are presented as mean ± sd in **Table S3**. Groups in A, B, and C (right) were compared by Kruskal-Wallis test followed by Dunn’s post-hoc test or by Fisher’s exact test in C (left and center), with an asterisk indicating genotype effects (p = P adjusted). * p < 0.05; ** p < 0.01; *** p < 0.001; ns, not significant.

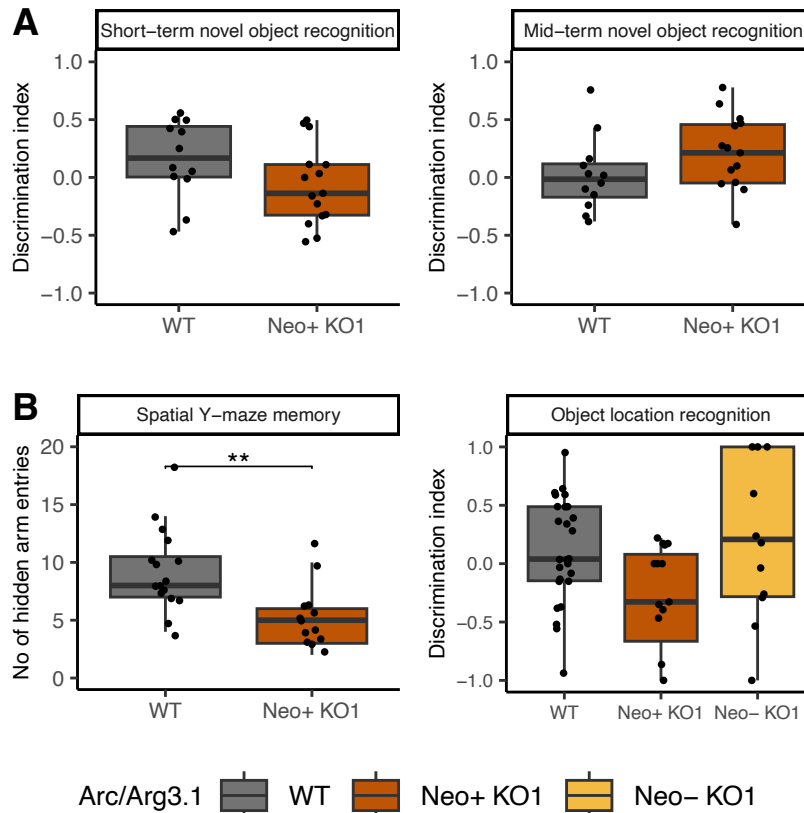


Figure S7. Neo⁺ KO1 mice display mild spatial short-term memory impairments, which are absent in Neo⁻ KO1 mice

In the novel object recognition test, Neo⁺ KO1 mice (brown; n = 8 females and 7 males) showed no difference in the index to discriminate between a novel and an old object when testing their short-term or mid-term recognition memory compared to WT (dark gray; n = 8 females and 4 males) (A). In the spatial Y-maze memory assay, Neo⁺ KO1 mice (brown; n = 6 females and 7 males) showed a reduced number of entries in the arm hidden in the habituation phase compared to WT (dark gray; n = 8 females and 8 males). In the object location recognition test, Neo⁺ KO1 mice (brown; n = 8 females and 7 males) displayed a reduced index to discriminate between an object that changed its location and the one that did not, compared to WT (dark gray; n = 16 females and 12 males), which was not the case for Neo⁻ KO1 mice (yellow; n = 8 females and 8 males) (B). Data are presented as mean ± sd in Table S1. All groups were compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, with an asterisk indicating genotype effects (p = P adjusted). *p < 0.05; **p < 0.01; ***p < 0.001.

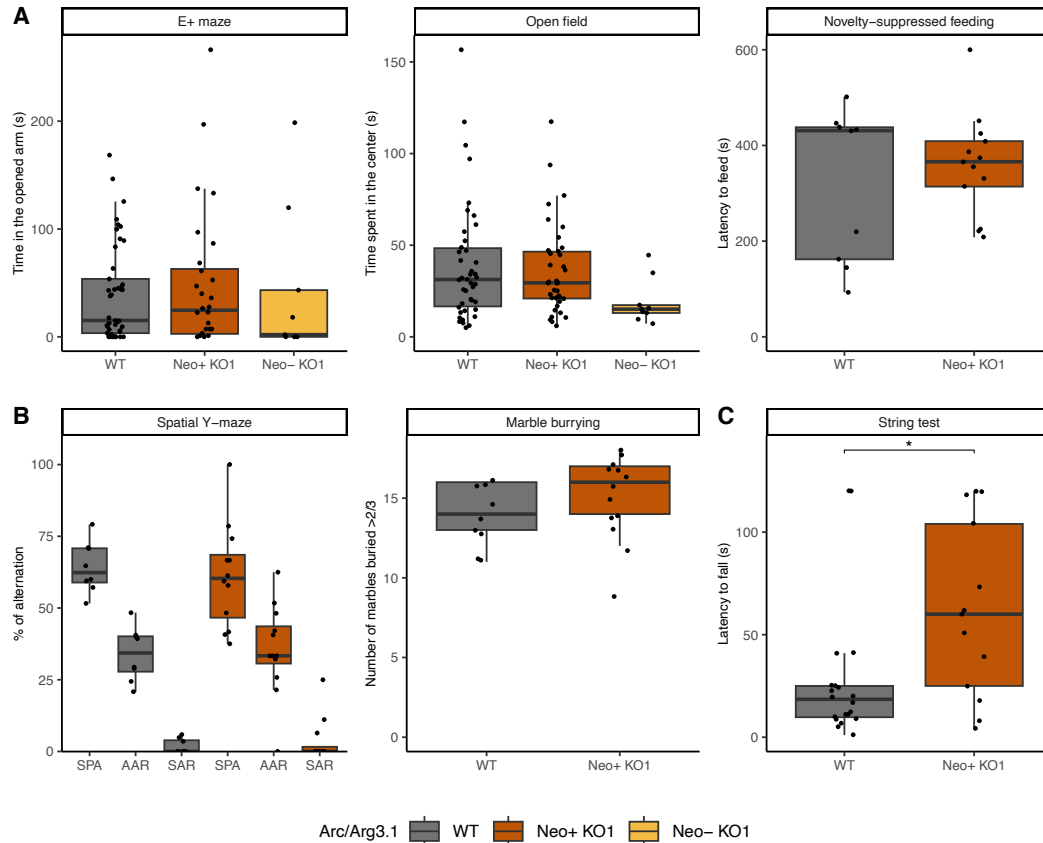


Figure S8. Social behavior impairments of Neo⁺ KO1 are not due to anxious-like behavior or motor impairments

Anxious-like behavior was evaluated in the elevated plus maze, open-field, and novelty-suppressed feeding tests (**A**). In the elevated plus maze test, Neo⁺ KO1 mice (brown; *n* = 14 females and 14 males) showed no difference in the time spent in the open arms of the maze compared to WT (dark gray; *n* = 20 females and 25 males) or Neo⁻ KO1 (yellow; *n* = 6 females and 3 males) mice (**A, left**). In the open-field test, Neo⁺ KO1 mice (brown; *n* = 14 females and 24 males) displayed no difference in the time spent in the center of the open-field arena compared to WT (dark gray; *n* = 18 females and 24 males) or Neo⁻ KO1 (yellow; *n* = 6 females and 3 males) mice (**A, center**). In the novelty-suppressed feeding test, Neo⁺ KO1 mice (brown; *n* = 7 females and 6 males) displayed comparable food latency to WT mice (dark gray; *n* = 4 females and 5 males) (**A, right**). Perseverative behavior was tested in the spatial Y-maze task, where Neo⁺ KO1 mice (brown; *n* = 6 females and 6 males) showed no difference in the percentage of alternation compared to WT (dark gray; *n* = 4 females and 4 males; **B, left**), and compulsive behavior in the marble-burying test, in which Neo⁺ KO1 mice (brown; *n* = 7 females and 6 males) showed no difference in the number of marbles buried (>2/3) compared to WT (dark gray; *n* = 4 females and 5 males) (**B, right**). In the string test assessing motor coordination, Neo⁺ KO1 mice (brown; *n* = 9 females and 4 males) displayed increased latency to fall from the string compared to WT (dark gray; *n* = 10 males and 10 females; **C**). Data are presented as mean ± sd in **Table S1**. All groups were compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, with an asterisk indicating genotype effects (*p* = *P* adjusted). **p* < 0.05; ***p* < 0.01; ****p* < 0.001.

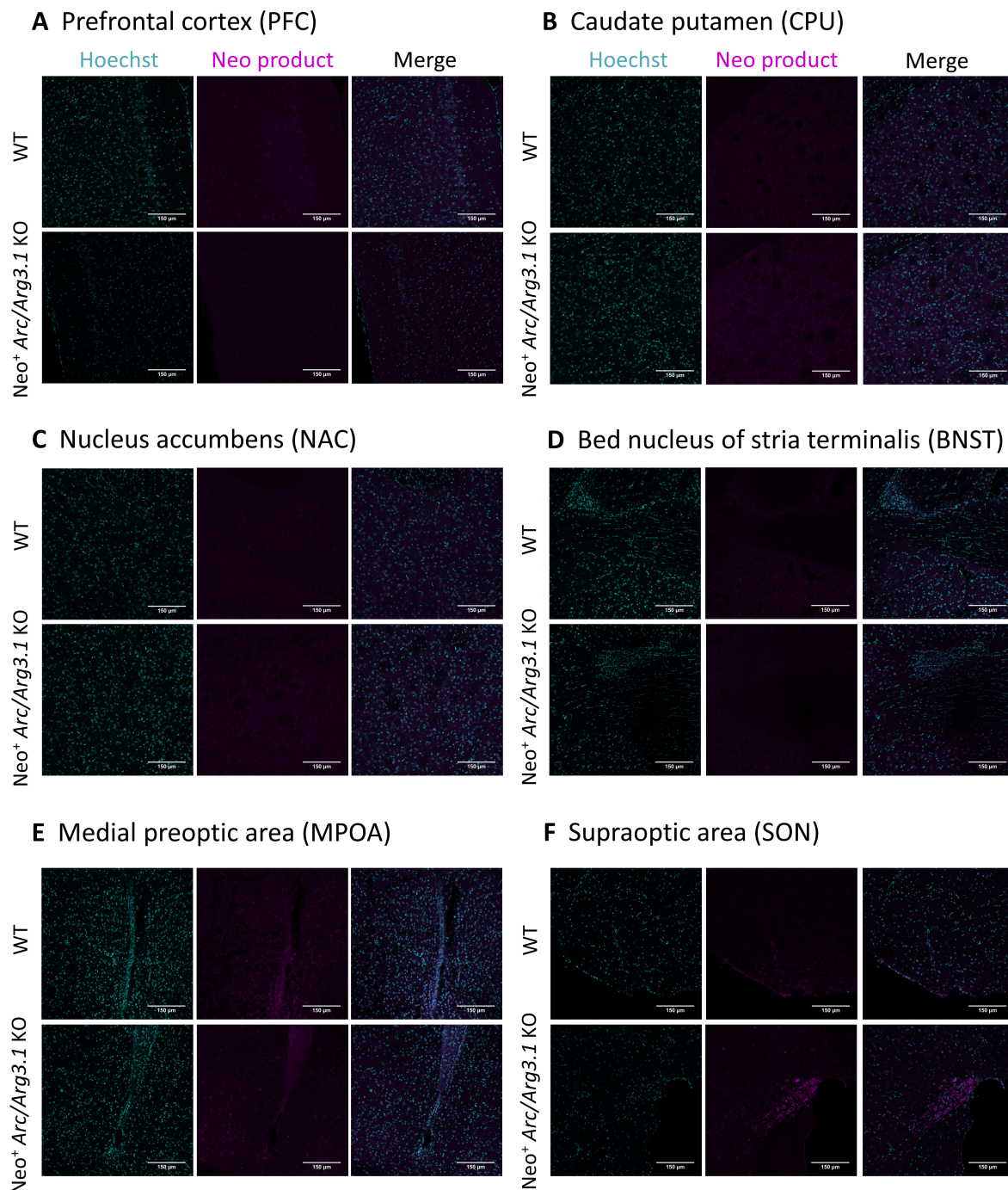


Figure S9. Neo protein product is not detected in brain structures other than the PVN

Aminoglycoside phosphotransferase coded by the Neo cassette (Neo product) was not detected at the protein level in the PFC (A), CPU (B), NAC (C), or BNST (D) of WT or Neo⁺ KO1 dams, while a non-specific signal in WT and Neo⁺ KO1 dams was observed in the MPOA (E) and SON (F). Scale bars = 150 μm. PFC, prefrontal cortex; NAC, nucleus accumbens; CPU, caudate putamen; BNST, bed nucleus of stria terminalis; MPOA, medial preoptic area; PVN, paraventricular nucleus of the hypothalamus; SON, supraoptic nucleus.

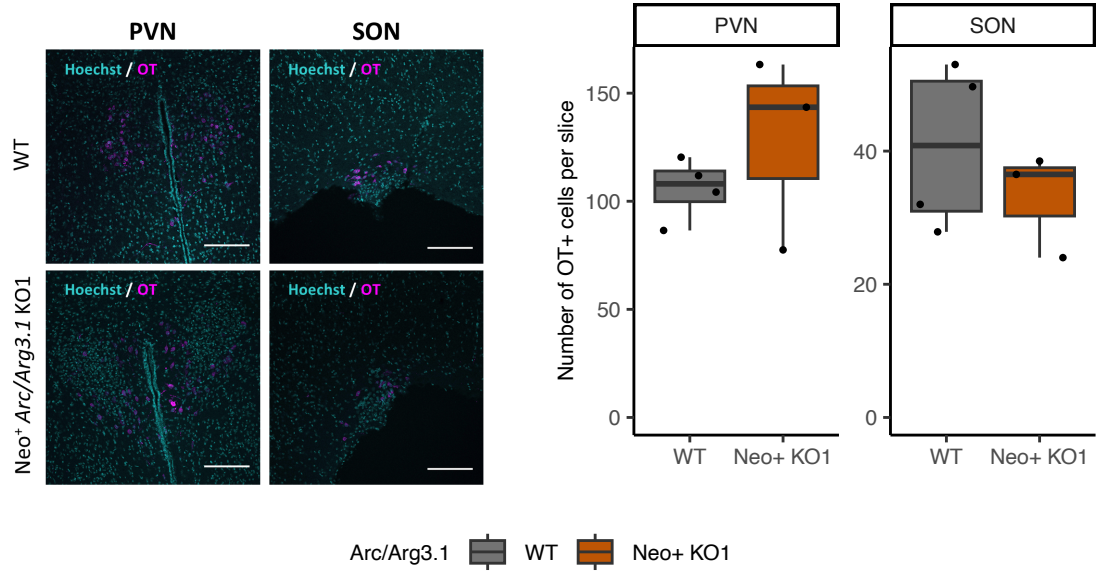


Figure S10. Neomycin cassette does not affect the number of oxytocinergic neurons in the PVN and SON

The number of oxytocinergic (OT) neurons in the PVN and SON was comparable between Neo⁺ KO1 (brown; n = 3) and WT dams (dark gray; n = 4) as shown by representative images (scale bars = 150 μ m) and cellular quantification. PVN, paraventricular nucleus of the hypothalamus; SON, supraoptic nucleus. Groups were compared by the Kruskal-Wallis test, followed by Dunn's post-hoc test, with an asterisk indicating genotype effects ($p = P$ adjusted). * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

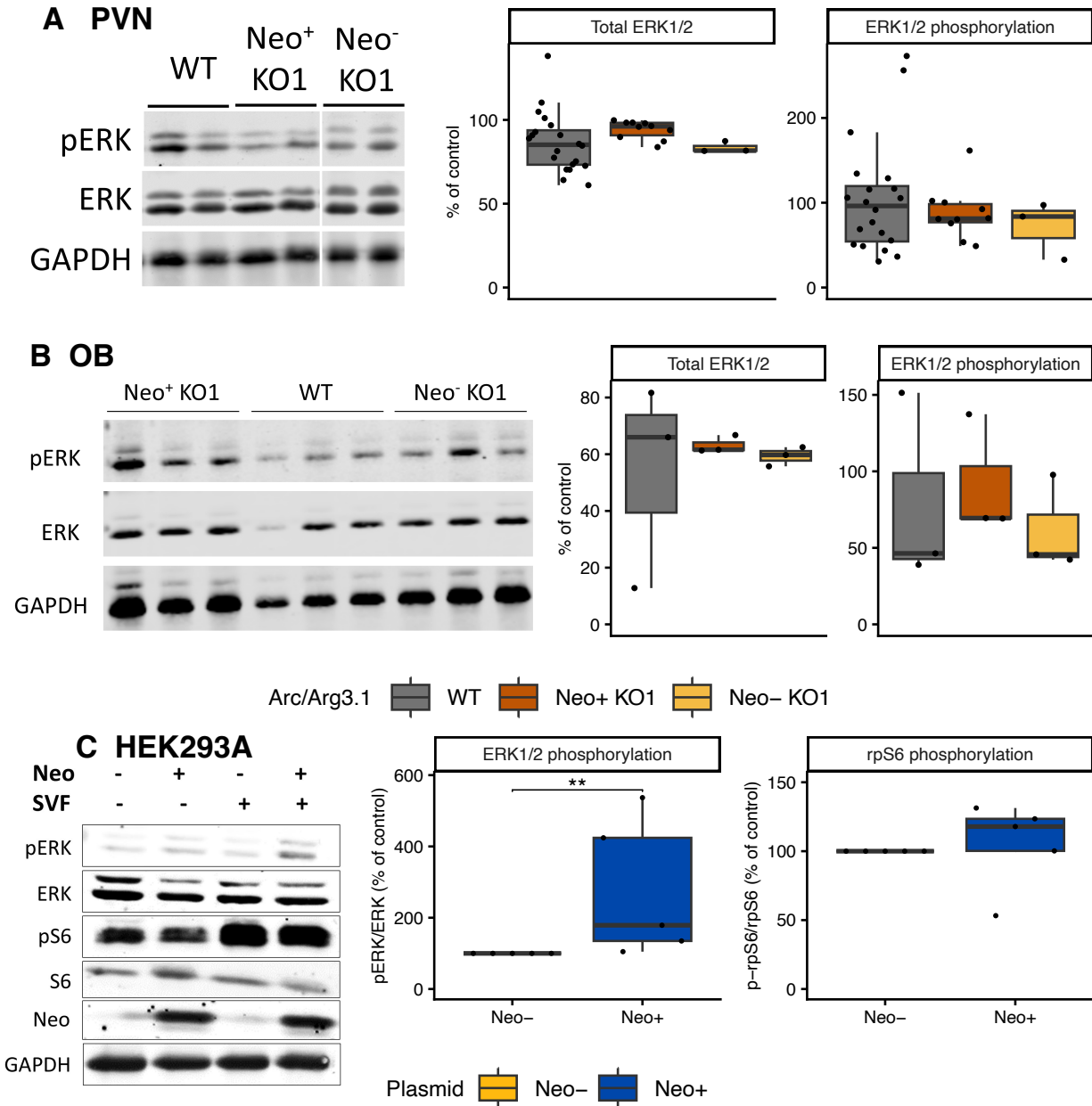


Figure S11. Neomycin cassette enhances ERK1/2 signaling in HEK293 cells, but not in Neo⁺ KO1 males or olfactory bulb

Neo⁺ KO1 males displayed tendency to increased total ERK1/2 levels compared to WT (brown; n = 10), or Neo⁻ KO1 males (yellow; n = 3) in the PVN (A), but not in the olfactory bulb (OB; B). The expression of the Neo product in HEK293 cells transfected with Neo⁺ plasmid (dark blue) induced increased phosphorylated ERK1/2, but not rpS6, compared to HEK293 cells transfected with Neo⁻ plasmid (yellow; n = 5 per condition; C). Data are presented as a representative blot (left) and protein quantification (right) with mean ± standard deviation (Table S4). Groups were compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, with an asterisk indicating genotype or Neo⁺ effects (p = P adjusted). * or #p < 0.05; ** or ##p < 0.01; *** or ###p < 0.001.

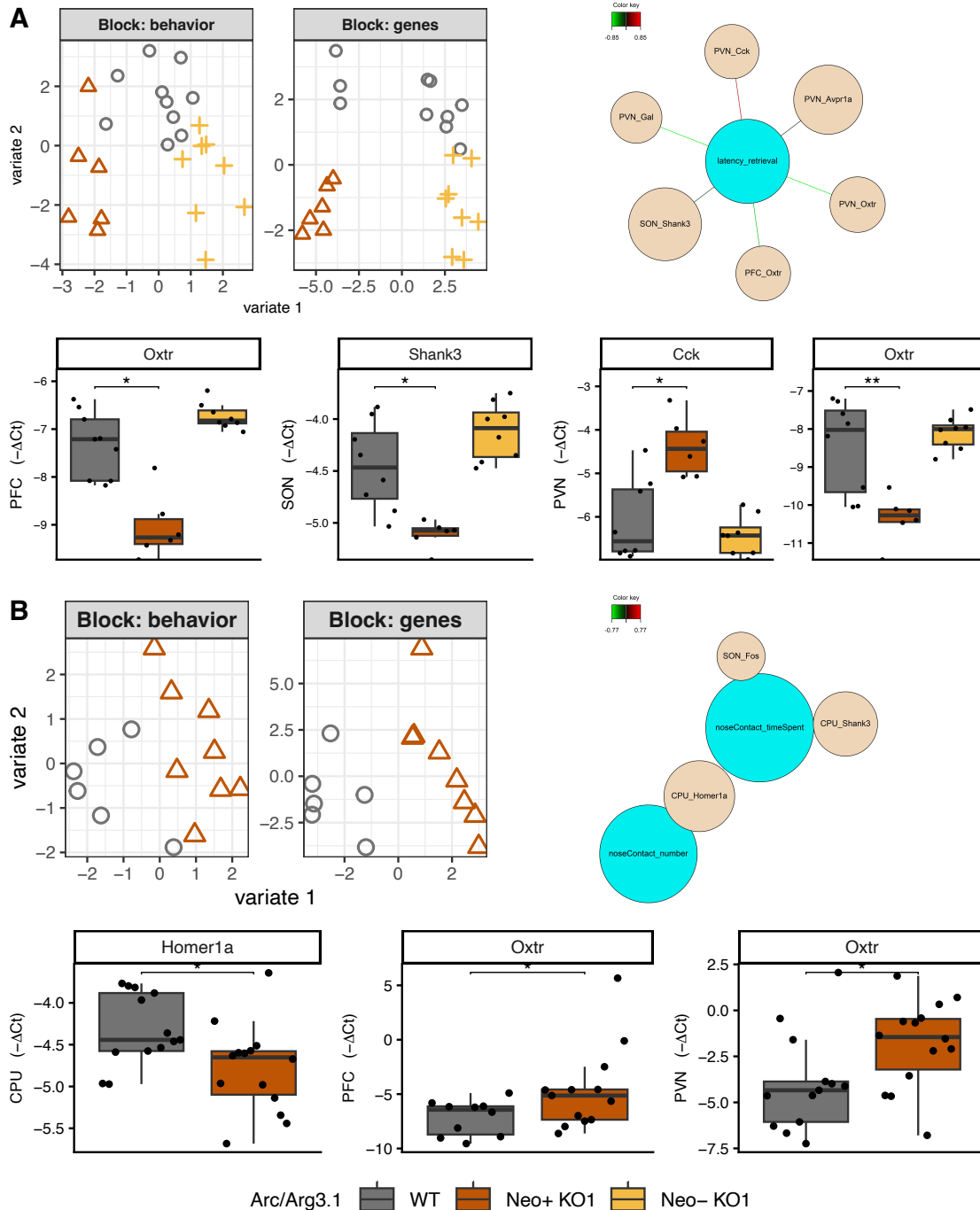


Figure S12. Integration of neomycin-induced maternal and social interaction impairments in *Neo*⁺ *Arc/Arg3.1* KO1 mice to gene dysregulation

(A) Integration of maternal behavior and motor stereotypies with gene expression from the oxytocin family, immediate early genes, ASD-associated and neuropeptide genes revealed a clear separation of *Neo*⁺ KO1 dams (brown triangles; n = 6) from WT (dark gray circles; n = 10) and *Neo*⁻ KO1 (yellow crosses; n = 8) dams, while network analysis revealed strong positive correlations between pup retrieval latency and genes that were significantly dysregulated in *Neo*⁺ KO1 dams compared to WT and *Neo*⁻ KO1. **(B)** Integration of social interaction with unfamiliar conspecifics

with gene expression from the oxytocin family, immediate early genes, ASD-associated and neuropeptide genes revealed a clear separation of Neo⁺ KO1 sexually naïve mice (brown triangles; n = 4 females and 4 males) from WT mice (dark gray circles; n = 4 females and 2 males) on both behavior and gene expression. While network analysis revealed strong correlations between time and number of nose contacts, including *Homer1a* in the CPU. The expression of *Homer1a* in the CPU showed dysregulation in the Neo⁺ KO1 naïve mice compared to WT, along with significant dysregulation of *Oxtr* expression in the PFC and PVN. Data are presented as mean ± standard deviation (**Tables S1-S2 S5**), compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, with asterisk indicating genotype effects (p = P adjusted). *p < 0.05; **p < 0.01; ***p < 0.001. PFC, prefrontal cortex; CPU, caudate putamen; PVN, paraventricular nucleus of the hypothalamus; SON, supraoptic nucleus.

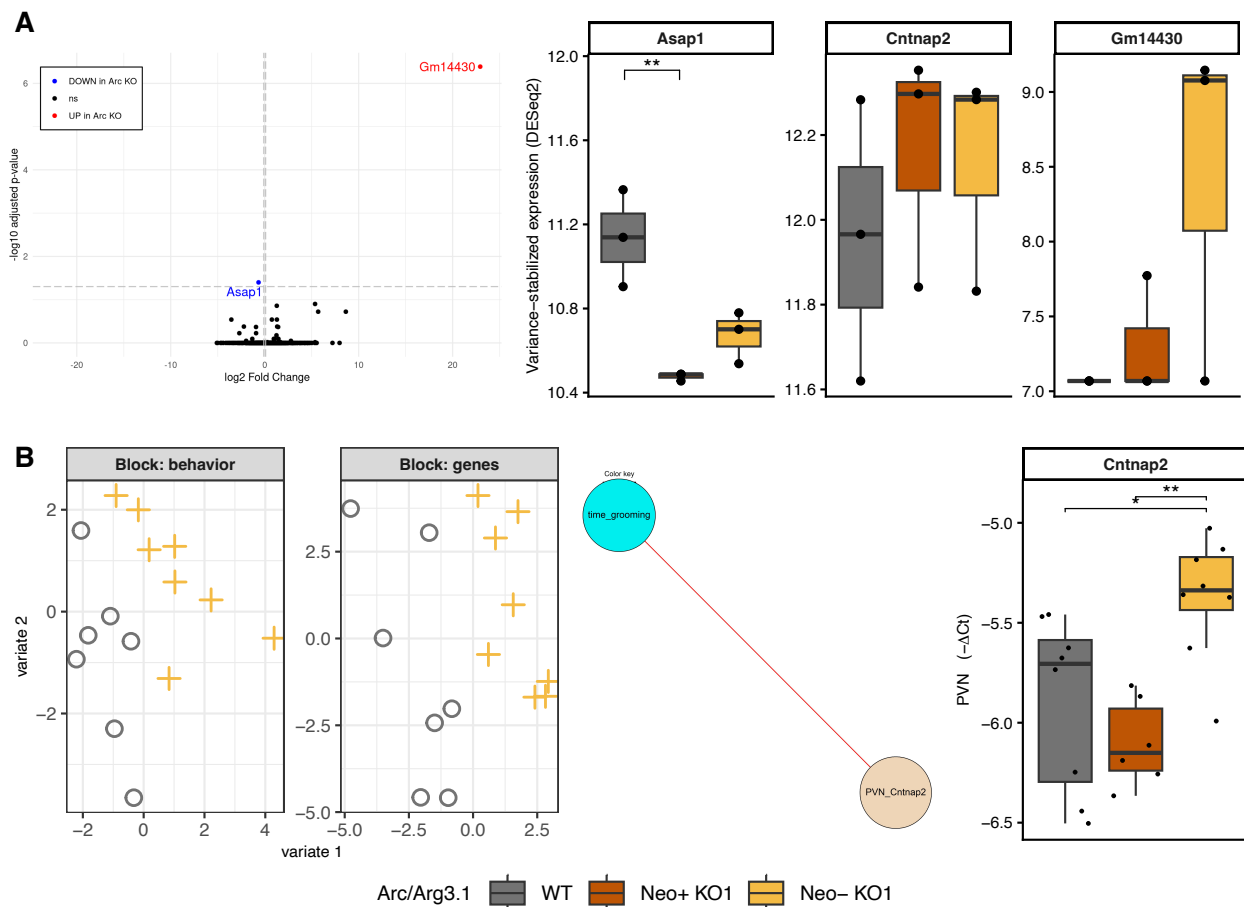


Figure S13. Effect of *Arc/Arg3.1* deletion on gene expression

To isolate the effect of *Arc/Arg3.1* deletion, differential expression in the PVN was analyzed by RNA sequencing in WT (gray), Neo⁺ KO1 (brown) and Neo⁻ KO1 (yellow) females (n = 3 per genotype; **A**). Volcano and bar plot analyses revealed minimal transcriptional changes, with only *Asap1* down-regulated gene and *Gm14430* up-regulated. Integration of behavioral parameters (maternal behavior, social interaction and motor stereotypies) with gene expression profiles from the oxytocin family, immediate early genes, ASD-associated and neuropeptide genes showed no clear separation between WT (dark gray circles; n = 10) and Neo⁻ KO1 (yellow crosses; n = 8) dams, but a potential positive correlation between time spent in self-grooming and upregulated *Cntnap2* expression (**B**). Data are presented as mean \pm standard deviation (**Tables S1-S2 S5**), compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, with asterisk indicating genotype effects ($p = P$ adjusted). * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. PFC, prefrontal cortex; CPU, caudate putamen; PVN, paraventricular nucleus of the hypothalamus; SON, supraoptic nucleus.

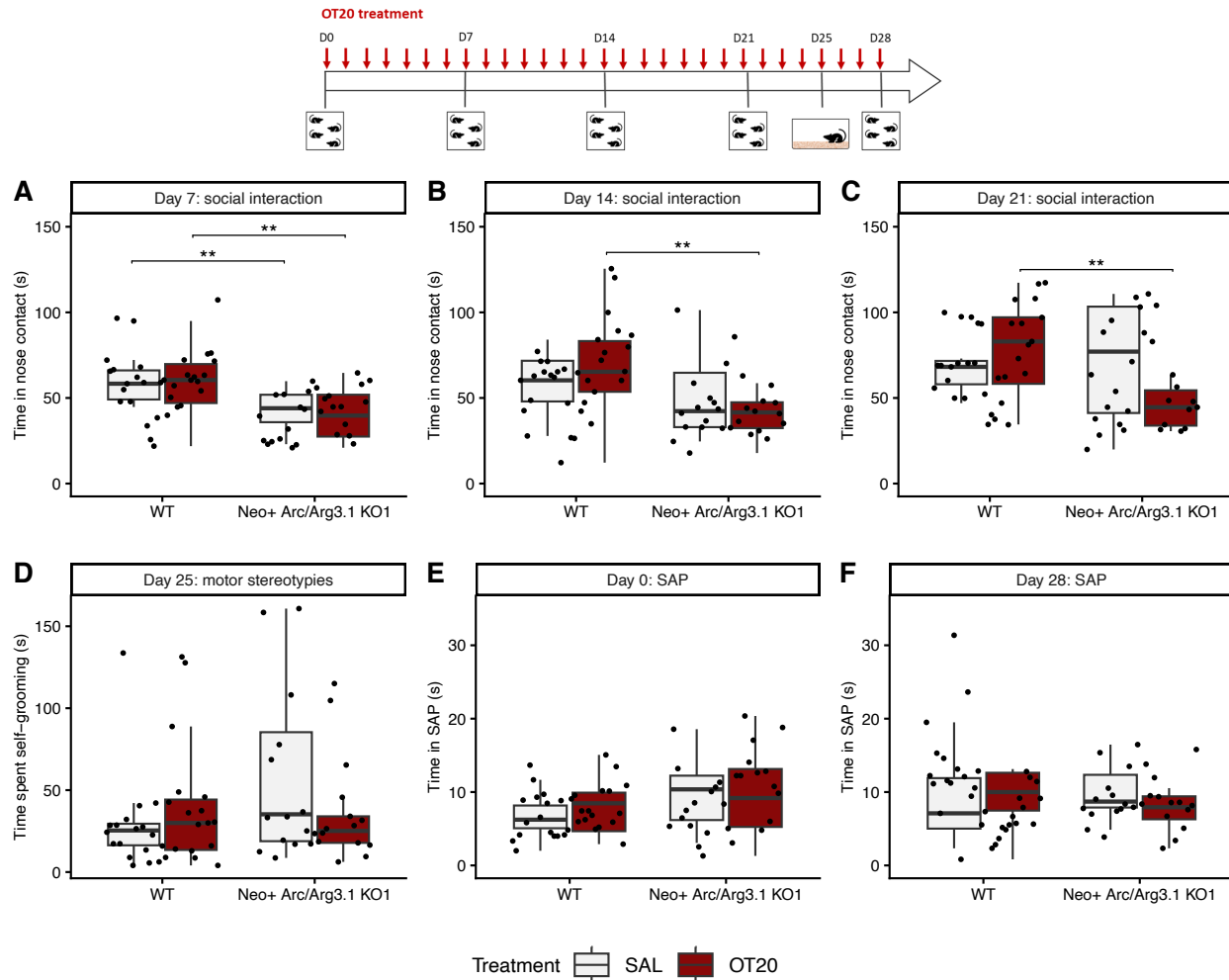


Figure S14. Subchronic oxytocin administration does not improve social interaction impairments, stereotyped or anxious-like behaviors

After 7 days of intranasal administration, both saline (SAL; light gray; n = 8 females and 4 males) and oxytocin (OT)-treated Neo⁺ KO1 mice at 20 μg kg⁻¹ (red; n = 10 females and 6 males) displayed reduced social interaction with unfamiliar treatment-matched conspecifics, compared to the SAL-treated (light gray; n = 7 females and 8 males) and OT-treated WT controls (red; n = 8 females and 11 males; **A**). On day 14, OT-treated Neo⁺ KO1 mice showed significantly reduced social interaction compared to OT-treated WT control (**B**). On day 21, OT-treated Neo⁺ KO1 mice **still** displayed reduced social interaction compared to OT-treated WT (**C**). In the motor stereotypy test at day 25, no difference in the time spent self-grooming was observed between Neo⁺ KO1 (SAL, n = 8 females and 4 males; OT, n = 11 females and 6 males) compared to WT (SAL, n = 8 females and 8 males; OT, n = 8 females and 11 males; **D**). No difference in the time spent in stretch-attend posture (SAP), a measure of anxious-like behavior, was observed **at day 0** (**E**) or day 28 (**F**). Data are presented as mean ± sd in **Table S2**. All groups were compared by the Kruskal-Wallis test followed by Dunn’s post-hoc test, with an asterisk indicating genotype effects and ladder treatment effects (p = P adjusted). * or #p < 0.05; ** or ##p < 0.01; *** or ###p < 0.001.

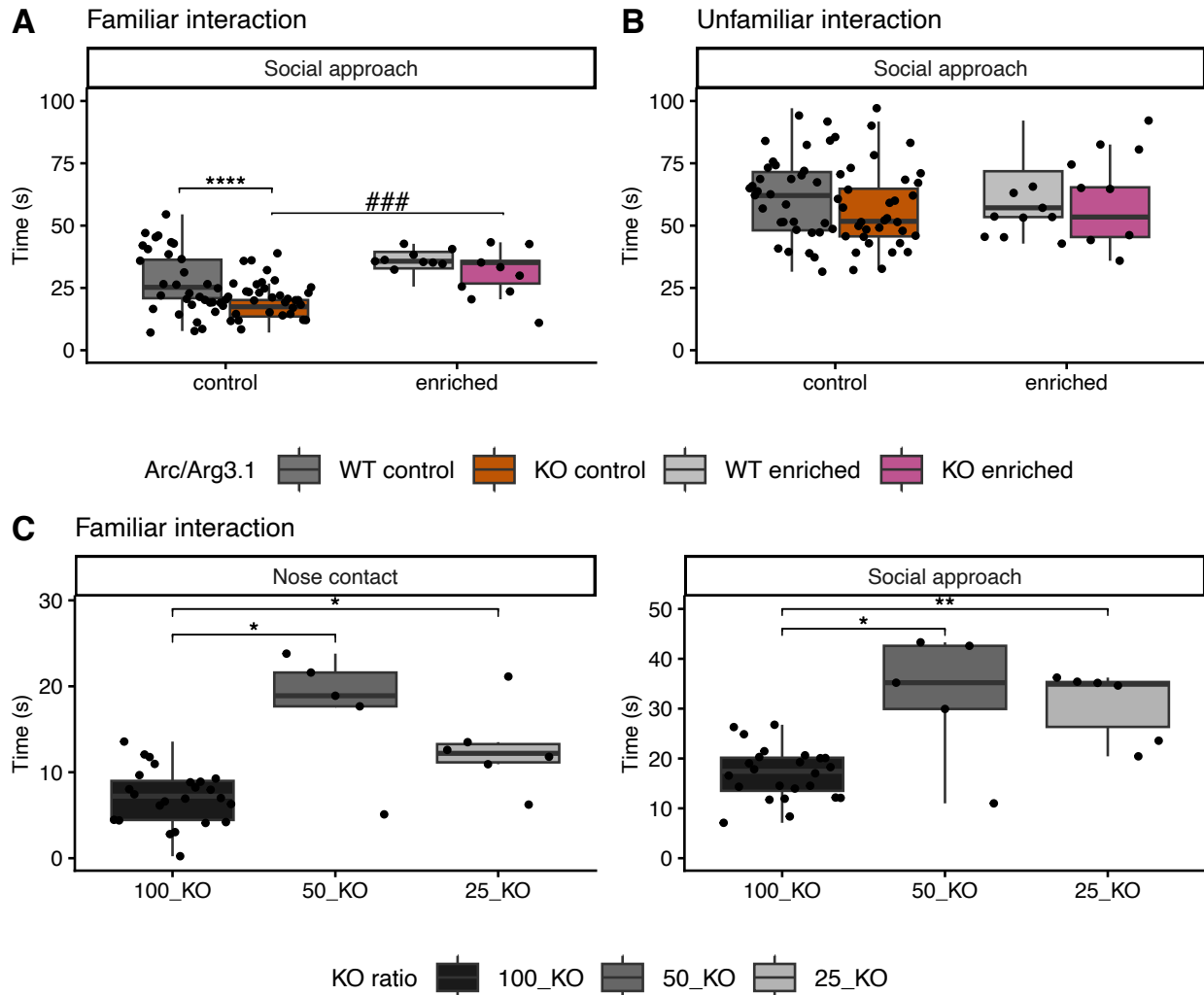


Figure S15. Neo^+ Arc/Arg3.1 KO1 mice raised in an enriched social environment display increased social interaction

Both Neo^+ KO1 mice (KO enriched; pink; $n = 12$) and WT mice (WT enriched; light gray; $n = 9$) raised in an enriched social environment with a mix of WT, heterozygous and Neo^+ KO1 littermates displayed enhanced social approach with familiar littermates (**A**), but not unfamiliar animals (**B**), compared to Neo^+ KO1 mice (KO control; brown; $n = 24$) and WT mice (WT control; dark gray; $n = 41$) raised with the sex-, genotype-matched animals. This effect was present in Neo^+ KO1 mice raised in 50% (50_KO; dark gray; $n = 5$) or 25% (25_KO; light gray; $n = 6$) KO1 genotype ratio over the total number of mice per cage, compared to Neo^+ KO1 mice raised only with KO1 animals (100_KO; black; $n = 24$). Data are presented as mean \pm sd in **Table S2**. All groups were compared by the Kruskal-Wallis test followed by Dunn's post-hoc test, with an asterisk indicating genotype effects. * or # $p < 0.05$; ** or ## $p < 0.01$; *** or ### $p < 0.001$.

SUPPLEMENTARY TABLES

Table S1. Mean and statistics of behavioral tests in adult mice

var_s1	genotype	line	pup_genotyp	n	n_females	n_males	mean	sd
delivery_laten	Neo+ Arc KO	Neo+ Arc	+/-	14	14	14	20,7142857	1,38278267
delivery_laten	Neo+ Arc KO	Neo+ Arc	KO	15	15	15	21,6666667	1,29099445
delivery_laten	Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	7	NA	NA
delivery_laten	Neo- Arc KO	Neo- Arc	+/-	7	7	7	20,7142857	1,38013112
delivery_laten	Neo- Arc KO	Neo- Arc	KO	8	8	8	21,375	0,91612538
delivery_laten	WT 1	Neo+ Arc	+/-	10	10	10	21,2	1,75119007
delivery_laten	WT 1	Neo+ Arc	WT	14	14	14	21,9285714	2,09263491
delivery_laten	WT 2	Neo- Arc	+/-	8	8	8	22,75	4,68279526
delivery_laten	WT 2	Neo- Arc	WT	7	7	7	21,4285714	0,97590007
delivery_laten	WT Bl6J	Neo- Arc Bl6J	WT	6	6	6	NA	NA
delivery_laten	NA	Neo+ Arc	+/-	15	15	15	22,8666667	4,12079512
duration_croi	Neo+ Arc KO	Neo+ Arc	+/-	14	14	14	34,3364286	42,2739889
duration_croi	Neo+ Arc KO	Neo+ Arc	KO	15	15	15	14,6365333	56,6870498
duration_croi	Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	7	0	0
duration_croi	Neo- Arc KO	Neo- Arc	+/-	7	7	7	14,8748571	19,2493451
duration_croi	Neo- Arc KO	Neo- Arc	KO	8	8	8	21,528	33,4219929
duration_croi	WT 1	Neo+ Arc	+/-	10	10	10	70,0606	49,4364414
duration_croi	WT 1	Neo+ Arc	WT	14	14	14	63,948	93,1498319
duration_croi	WT 2	Neo- Arc	+/-	8	8	8	19,044	26,5788724
duration_croi	WT 2	Neo- Arc	WT	7	7	7	9,11628571	10,7489169
duration_croi	WT Bl6J	Neo- Arc Bl6J	WT	6	6	6	2,85433333	6,99166022
duration_croi	NA	Neo+ Arc	+/-	15	15	15	23,4942667	30,5824361
duration_digg	Neo+ Arc KO	Neo+ Arc	+/-	14	14	14	4,55928571	4,13536711
duration_digg	Neo+ Arc KO	Neo+ Arc	KO	15	15	15	2,9964	2,11139486
duration_digg	Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	7	3,3994	1,16500657
duration_digg	Neo- Arc KO	Neo- Arc	+/-	7	7	7	3,51742857	1,66514643
duration_digg	Neo- Arc KO	Neo- Arc	KO	8	8	8	2,032625	0,78458523
duration_digg	WT 1	Neo+ Arc	+/-	10	10	10	1,708	1,13136771
duration_digg	WT 1	Neo+ Arc	WT	14	14	14	2,17857143	1,61671227
duration_digg	WT 2	Neo- Arc	+/-	8	8	8	1,899625	1,25466808
duration_digg	WT 2	Neo- Arc	WT	7	7	7	1,98014286	1,51027563
duration_digg	WT Bl6J	Neo- Arc Bl6J	WT	6	6	6	3,57666667	1,37732068
duration_digg	NA	Neo+ Arc	+/-	15	15	15	3,02953333	1,34882583
duration_groc	Neo+ Arc KO	Neo+ Arc	+/-	14	14	14	24,5305	26,612681
duration_groc	Neo+ Arc KO	Neo+ Arc	KO	15	15	15	13,8824	16,445013
duration_groc	Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	7	6,2406	2,42848014
duration_groc	Neo- Arc KO	Neo- Arc	+/-	7	7	7	16,3387143	9,4119908
duration_groc	Neo- Arc KO	Neo- Arc	KO	8	8	8	29,280875	21,0492997
duration_groc	WT 1	Neo+ Arc	+/-	10	10	10	18,3617	17,7182309
duration_groc	WT 1	Neo+ Arc	WT	14	14	14	20,3437857	16,617421
duration_groc	WT 2	Neo- Arc	+/-	8	8	8	15,812125	20,9977994
duration_groc	WT 2	Neo- Arc	WT	7	7	7	14,4734286	16,6236992
duration_groc	WT Bl6J	Neo- Arc Bl6J	WT	6	6	6	7,85766667	9,84429079
duration_groc	NA	Neo+ Arc	+/-	15	15	15	12,7756667	11,4954445
duration_insi	Neo+ Arc KO	Neo+ Arc	+/-	14	14	14	45,5151429	28,8607264
duration_insi	Neo+ Arc KO	Neo+ Arc	KO	15	15	15	81,0774667	140,390426
duration_insi	Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	7	8,0426	4,39620709
duration_insi	Neo- Arc KO	Neo- Arc	+/-	7	7	7	32,269	23,0278692
duration_insi	Neo- Arc KO	Neo- Arc	KO	8	8	8	47,76925	35,4378983
duration_insi	WT 1	Neo+ Arc	+/-	10	10	10	90,032	63,8720853
duration_insi	WT 1	Neo+ Arc	WT	14	14	14	59,081292	39,2301924
duration_insi	WT 2	Neo- Arc	+/-	8	8	8	34,14325	24,4164517
duration_insi	WT 2	Neo- Arc	WT	7	7	7	39,5987143	28,851265
duration_insi	WT Bl6J	Neo- Arc Bl6J	WT	6	6	6	15,2618333	12,1646901
duration_insi	NA	Neo+ Arc	+/-	15	15	15	58,624	51,4952065
duration_nest	Neo+ Arc KO	Neo+ Arc	+/-	14	14	14	14,2894286	12,1753351
duration_nest	Neo+ Arc KO	Neo+ Arc	KO	15	15	15	6,94493333	8,93768888
duration_nest	Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	7	5,858	7,11837734
duration_nest	Neo- Arc KO	Neo- Arc	+/-	7	7	7	3,507	5,15731396
duration_nest	Neo- Arc KO	Neo- Arc	KO	8	8	8	9,739125	5,78894645
duration_nest	WT 1	Neo+ Arc	+/-	10	10	10	19,2613	8,05691686
duration_nest	WT 1	Neo+ Arc	WT	14	14	14	14,2789286	5,65803102
duration_nest	WT 2	Neo- Arc	+/-	8	8	8	11,278625	8,56057408
duration_nest	WT 2	Neo- Arc	WT	7	7	7	10,6685714	5,47197283
duration_nest	WT Bl6J	Neo- Arc Bl6J	WT	6	6	6	4,871	6,01696016
duration_nest	NA	Neo+ Arc	+/-	15	15	15	12,3451333	5,06830338
duration_out:	Neo+ Arc KO	Neo+ Arc	+/-	14	14	14	50,1244235	48,5494187
duration_out:	Neo+ Arc KO	Neo+ Arc	KO	15	15	15	69,5014667	56,1736868
duration_out:	Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	7	41,2322	16,0848155

delivery_laten Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	20,7142857	1,38278267
delivery_laten Neo+ Arc KO	Neo+ Arc	KO	15	15	0	21,6666667	1,29099445
delivery_laten Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	NA	NA
delivery_laten Neo- Arc KO	Neo- Arc	+/-	7	7	0	20,7142857	1,38013112
delivery_laten Neo- Arc KO	Neo- Arc	KO	8	8	0	21,375	0,91612538
delivery_laten WT 1	Neo+ Arc	+/-	10	10	0	21,2	1,75119007
delivery_laten WT 1	Neo+ Arc	WT	14	14	0	21,9285714	2,09263491
delivery_laten WT 2	Neo- Arc	+/-	8	8	0	22,75	4,68279526
delivery_laten WT 2	Neo- Arc	WT	7	7	0	21,4285714	0,97590007
delivery_laten WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	NA	NA
delivery_laten NA	Neo+ Arc	+/-	15	15	0	22,8666667	4,12079512
duration_croi Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	34,3364286	42,2739889
duration_croi Neo+ Arc KO	Neo+ Arc	KO	15	15	0	14,6365333	56,6870498
duration_croi Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	0	0
duration_croi Neo- Arc KO	Neo- Arc	+/-	7	7	0	14,8748571	19,2493451
duration_croi Neo- Arc KO	Neo- Arc	KO	8	8	0	21,528	33,4219929
duration_croi WT 1	Neo+ Arc	+/-	10	10	0	70,0606	49,4364414
duration_croi WT 1	Neo+ Arc	WT	14	14	0	63,948	93,1498319
duration_croi WT 2	Neo- Arc	+/-	8	8	0	19,044	26,5788724
duration_croi WT 2	Neo- Arc	WT	7	7	0	9,11628571	10,7489169
duration_croi WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	2,85433333	6,99166022
duration_croi NA	Neo+ Arc	+/-	15	15	0	23,4942667	30,5824361
duration_digg Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	4,55928571	4,13536711
duration_digg Neo+ Arc KO	Neo+ Arc	KO	15	15	0	2,9964	2,11139486
duration_digg Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	3,3994	1,16500657
duration_digg Neo- Arc KO	Neo- Arc	+/-	7	7	0	3,51742857	1,66514643
duration_digg Neo- Arc KO	Neo- Arc	KO	8	8	0	2,032625	0,78458523
duration_digg WT 1	Neo+ Arc	+/-	10	10	0	1,708	1,13136771
duration_digg WT 1	Neo+ Arc	WT	14	14	0	2,17857143	1,61671227
duration_digg WT 2	Neo- Arc	+/-	8	8	0	1,899625	1,25466808
duration_digg WT 2	Neo- Arc	WT	7	7	0	1,98014286	1,51027563
duration_digg WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	3,57666667	1,37732068
duration_digg NA	Neo+ Arc	+/-	15	15	0	3,02953333	1,34882583
duration_groc Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	24,5305	26,612681
duration_groc Neo+ Arc KO	Neo+ Arc	KO	15	15	0	13,8824	16,445013
duration_groc Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	6,2406	2,42848014
duration_groc Neo- Arc KO	Neo- Arc	+/-	7	7	0	16,3387143	9,4119908
duration_groc Neo- Arc KO	Neo- Arc	KO	8	8	0	29,280875	21,0492997
duration_groc WT 1	Neo+ Arc	+/-	10	10	0	18,3617	17,7182309
duration_groc WT 1	Neo+ Arc	WT	14	14	0	20,3437857	16,617421
duration_groc WT 2	Neo- Arc	+/-	8	8	0	15,812125	20,9977994
duration_groc WT 2	Neo- Arc	WT	7	7	0	14,4734286	16,6236992
duration_groc WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	7,85766667	9,84429079
duration_groc NA	Neo+ Arc	+/-	15	15	0	12,7756667	11,4954445
duration_insi Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	45,5151429	28,8607264
duration_insi Neo+ Arc KO	Neo+ Arc	KO	15	15	0	81,0774667	140,390426
duration_insi Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	8,0426	4,39620709
duration_insi Neo- Arc KO	Neo- Arc	+/-	7	7	0	32,269	23,0278692
duration_insi Neo- Arc KO	Neo- Arc	KO	8	8	0	47,76925	35,4378983
duration_insi WT 1	Neo+ Arc	+/-	10	10	0	90,032	63,8720853
duration_insi WT 1	Neo+ Arc	WT	14	14	0	59,081292	39,2301924
duration_insi WT 2	Neo- Arc	+/-	8	8	0	34,14325	24,4164517
duration_insi WT 2	Neo- Arc	WT	7	7	0	39,5987143	28,851265
duration_insi WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	15,2618333	12,1646901
duration_insi NA	Neo+ Arc	+/-	15	15	0	58,624	51,4952065
duration_nest Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	14,2894286	12,1753351
duration_nest Neo+ Arc KO	Neo+ Arc	KO	15	15	0	6,94493333	8,93768888
duration_nest Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	5,858	7,11837734
duration_nest Neo- Arc KO	Neo- Arc	+/-	7	7	0	3,507	5,15731396
duration_nest Neo- Arc KO	Neo- Arc	KO	8	8	0	9,739125	5,78894645
duration_nest WT 1	Neo+ Arc	+/-	10	10	0	19,2613	8,05691686
duration_nest WT 1	Neo+ Arc	WT	14	14	0	14,2789286	5,65803102
duration_nest WT 2	Neo- Arc	+/-	8	8	0	11,278625	8,56057408
duration_nest WT 2	Neo- Arc	WT	7	7	0	10,6685714	5,47197283
duration_nest WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	4,871	6,01696016
duration_nest NA	Neo+ Arc	+/-	15	15	0	12,3451333	5,06830338
duration_out: Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	50,1244235	48,5494187
duration_out: Neo+ Arc KO	Neo+ Arc	KO	15	15	0	69,5014667	56,1736868
duration_out: Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	41,2322	16,0848155

duration_out: Neo- Arc KO	Neo- Arc	+/-	7	7	0	54,8928571	50,5049868
duration_out: Neo- Arc KO	Neo- Arc	KO	8	8	0	43,60725	21,5138352
duration_out: WT 1	Neo+ Arc	+/-	10	10	0	25,1518	6,01815278
duration_out: WT 1	Neo+ Arc	WT	14	14	0	28,1217143	12,8984107
duration_out: WT 2	Neo- Arc	+/-	8	8	0	40,310625	14,414404
duration_out: WT 2	Neo- Arc	WT	7	7	0	35,4047143	12,8151177
duration_out: WT BI6J	Neo- Arc BI6J	WT	6	6	0	93,837	75,9179541
duration_out: NA	Neo+ Arc	+/-	15	15	0	34,8614	12,1649883
duration_sniff Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	2,81728571	1,64846639
duration_sniff Neo+ Arc KO	Neo+ Arc	KO	15	15	0	1,5186	0,66922693
duration_sniff Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	1,1234	0,19610533
duration_sniff Neo- Arc KO	Neo- Arc	+/-	7	7	0	1,31785714	0,32918102
duration_sniff Neo- Arc KO	Neo- Arc	KO	8	8	0	1,658375	0,5092347
duration_sniff WT 1	Neo+ Arc	+/-	10	10	0	3,3172	2,45504609
duration_sniff WT 1	Neo+ Arc	WT	14	14	0	1,89957143	0,96987031
duration_sniff WT 2	Neo- Arc	+/-	8	8	0	1,474125	0,45435683
duration_sniff WT 2	Neo- Arc	WT	7	7	0	1,69742857	0,42087166
duration_sniff WT BI6J	Neo- Arc BI6J	WT	6	6	0	1,2175	0,33614922
duration_sniff NA	Neo+ Arc	+/-	15	15	0	1,89973333	0,82459067
latency_first Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	508,259	710,438842
latency_first Neo+ Arc KO	Neo+ Arc	KO	15	15	0	1746,99173	205,300134
latency_first Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	614,532	770,842646
latency_first Neo- Arc KO	Neo- Arc	+/-	7	7	0	1047,49943	938,631766
latency_first Neo- Arc KO	Neo- Arc	KO	8	8	0	108,31825	175,520585
latency_first WT 1	Neo+ Arc	+/-	10	10	0	76,0816	65,3032504
latency_first WT 1	Neo+ Arc	WT	14	14	0	337,608143	633,190722
latency_first WT 2	Neo- Arc	+/-	8	8	0	84,4545	76,8883205
latency_first WT 2	Neo- Arc	WT	7	7	0	508,515857	731,566559
latency_first WT BI6J	Neo- Arc BI6J	WT	6	6	0	433,2825	698,507788
latency_first NA	Neo+ Arc	+/-	15	15	0	370,4274	559,191086
latency_fourth Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	900,420857	819,314783
latency_fourth Neo+ Arc KO	Neo+ Arc	KO	15	15	0	1749,72833	194,701328
latency_fourth Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	625,1195	832,135994
latency_fourth Neo- Arc KO	Neo- Arc	+/-	7	7	0	1080,084	897,939897
latency_fourth Neo- Arc KO	Neo- Arc	KO	8	8	0	223,62625	189,101967
latency_fourth WT 1	Neo+ Arc	+/-	10	10	0	487,0805	696,33888
latency_fourth WT 1	Neo+ Arc	WT	14	14	0	623,678286	782,324132
latency_fourth WT 2	Neo- Arc	+/-	8	8	0	420,361286	614,582918
latency_fourth WT 2	Neo- Arc	WT	7	7	0	582,737571	693,300279
latency_fourth WT BI6J	Neo- Arc BI6J	WT	6	6	0	643,721	842,29681
latency_fourth NA	Neo+ Arc	+/-	15	15	0	1066,63933	816,520903
latency_full_n Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	1118,21429	646,301927
latency_full_n Neo+ Arc KO	Neo+ Arc	KO	15	15	0	1764	139,4274
latency_full_n Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	1484,16667	574,929706
latency_full_n Neo- Arc KO	Neo- Arc	+/-	7	7	0	1425,71429	528,76766
latency_full_n Neo- Arc KO	Neo- Arc	KO	8	8	0	866,875	717,997898
latency_full_n WT 1	Neo+ Arc	+/-	10	10	0	687	593,109508
latency_full_n WT 1	Neo+ Arc	WT	14	14	0	913,076923	713,25702
latency_full_n WT 2	Neo- Arc	+/-	8	8	0	999,375	631,480333
latency_full_n WT 2	Neo- Arc	WT	7	7	0	1046,14286	598,647762
latency_full_n WT BI6J	Neo- Arc BI6J	WT	6	6	0	1225,5	567,414751
latency_full_n NA	Neo+ Arc	+/-	15	15	0	1159,66667	734,203812
latency_secon Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	661,2565	770,062331
latency_secon Neo+ Arc KO	Neo+ Arc	KO	15	15	0	1749,33227	196,235287
latency_secon Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	714,953429	823,194034
latency_secon Neo- Arc KO	Neo- Arc	+/-	7	7	0	1054,88014	929,401609
latency_secon Neo- Arc KO	Neo- Arc	KO	8	8	0	151,929375	168,142365
latency_secon WT 1	Neo+ Arc	+/-	10	10	0	214,3223	330,597659
latency_secon WT 1	Neo+ Arc	WT	14	14	0	351,894429	627,091266
latency_secon WT 2	Neo- Arc	+/-	8	8	0	135,808125	98,8939187
latency_secon WT 2	Neo- Arc	WT	7	7	0	530,143429	721,39132
latency_secon WT BI6J	Neo- Arc BI6J	WT	6	6	0	617,1535	835,435756
latency_secon NA	Neo+ Arc	+/-	15	15	0	411,556467	575,704536
latency_sniffir Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	8,07521429	9,53074327
latency_sniffir Neo+ Arc KO	Neo+ Arc	KO	15	15	0	9,1578	7,68663469
latency_sniffir Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	4,5836	5,82663735
latency_sniffir Neo- Arc KO	Neo- Arc	+/-	7	7	0	12,3441429	7,28079534
latency_sniffir Neo- Arc KO	Neo- Arc	KO	8	8	0	6,705625	3,17736912
latency_sniffir WT 1	Neo+ Arc	+/-	10	10	0	3,6092	1,17839163
latency_sniffir WT 1	Neo+ Arc	WT	14	14	0	7,651	9,53321395

latency_sniffir WT 2	Neo- Arc	+/-	8	8	0	5,817125	4,26205495
latency_sniffir WT 2	Neo- Arc	WT	7	7	0	5,68357143	5,2716977
latency_sniffir WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	4,58316667	4,92603294
latency_sniffir NA	Neo+ Arc	+/-	15	15	0	4,83666667	2,3071591
latency_third Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	812,215071	788,277613
latency_third Neo+ Arc KO	Neo+ Arc	KO	15	15	0	1749,67427	194,910727
latency_third Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	613,700167	831,762498
latency_third Neo- Arc KO	Neo- Arc	+/-	7	7	0	1061,43871	921,194414
latency_third Neo- Arc KO	Neo- Arc	KO	8	8	0	172,082	168,769756
latency_third WT 1	Neo+ Arc	+/-	10	10	0	314,2894	529,117571
latency_third WT 1	Neo+ Arc	WT	14	14	0	370,637643	618,982511
latency_third WT 2	Neo- Arc	+/-	8	8	0	158,731429	93,0009793
latency_third WT 2	Neo- Arc	WT	7	7	0	560,028143	706,613229
latency_third WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	634,428833	844,750444
latency_third NA	Neo+ Arc	+/-	15	15	0	812,538667	824,784859
litter_size Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	6,57142857	1,28388148
litter_size Neo+ Arc KO	Neo+ Arc	KO	15	15	0	7,8	1,93464652
litter_size Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	5,85714286	2,41029538
litter_size Neo- Arc KO	Neo- Arc	+/-	7	7	0	7,28571429	1,11269728
litter_size Neo- Arc KO	Neo- Arc	KO	8	8	0	8	1,30930734
litter_size WT 1	Neo+ Arc	+/-	10	10	0	8,7	1,82878223
litter_size WT 1	Neo+ Arc	WT	14	14	0	6,64285714	1,69193303
litter_size WT 2	Neo- Arc	+/-	8	8	0	6,625	2,82526863
litter_size WT 2	Neo- Arc	WT	7	7	0	8,57142857	1,27241802
litter_size WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	7,33333333	2,25092574
litter_size NA	Neo+ Arc	+/-	15	15	0	8,13333333	1,7674302
number_crou Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	3,07142857	2,61546542
number_crou Neo+ Arc KO	Neo+ Arc	KO	15	15	0	0,13333333	0,51639778
number_crou Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	0	0
number_crou Neo- Arc KO	Neo- Arc	+/-	7	7	0	3,57142857	5,68205194
number_crou Neo- Arc KO	Neo- Arc	KO	8	8	0	5,125	6,17454452
number_crou WT 1	Neo+ Arc	+/-	10	10	0	6,7	3,6224608
number_crou WT 1	Neo+ Arc	WT	14	14	0	3,42857143	3,7357789
number_crou WT 2	Neo- Arc	+/-	8	8	0	1,625	2,55999442
number_crou WT 2	Neo- Arc	WT	7	7	0	2	2,82842712
number_crou WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	0,33333333	0,81649658
number_crou NA	Neo+ Arc	+/-	15	15	0	4,8	5,87002069
number_diggi Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	27,5	17,0101779
number_diggi Neo+ Arc KO	Neo+ Arc	KO	15	15	0	23,3333333	23,8317515
number_diggi Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	86,6	37,520661
number_diggi Neo- Arc KO	Neo- Arc	+/-	7	7	0	25,4285714	20,9113776
number_diggi Neo- Arc KO	Neo- Arc	KO	8	8	0	13	6,86606562
number_diggi WT 1	Neo+ Arc	+/-	10	10	0	13,7	17,2243368
number_diggi WT 1	Neo+ Arc	WT	14	14	0	14,5714286	17,1541172
number_diggi WT 2	Neo- Arc	+/-	8	8	0	17,375	15,1179883
number_diggi WT 2	Neo- Arc	WT	7	7	0	10,5714286	12,5014285
number_diggi WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	76,3333333	32,3645897
number_diggi NA	Neo+ Arc	+/-	15	15	0	31,6	24,0380651
number_groo Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	2,35714286	1,44686094
number_groo Neo+ Arc KO	Neo+ Arc	KO	15	15	0	2,26666667	1,9808608
number_groo Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	2,6	2,19089023
number_groo Neo- Arc KO	Neo- Arc	+/-	7	7	0	3,14285714	2,11570094
number_groo Neo- Arc KO	Neo- Arc	KO	8	8	0	2,875	2,35660167
number_groo WT 1	Neo+ Arc	+/-	10	10	0	1,6	2,11869981
number_groo WT 1	Neo+ Arc	WT	14	14	0	3	3,30500786
number_groo WT 2	Neo- Arc	+/-	8	8	0	1,625	1,92260983
number_groo WT 2	Neo- Arc	WT	7	7	0	1,28571429	1,11269728
number_groo WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	3,16666667	2,56255081
number_groo NA	Neo+ Arc	+/-	15	15	0	2,33333333	2,43975018
number_insid Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	23,7857143	9,84634701
number_insid Neo+ Arc KO	Neo+ Arc	KO	15	15	0	17,86666667	11,9514892
number_insid Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	38,2	11,1669154
number_insid Neo- Arc KO	Neo- Arc	+/-	7	7	0	24,2857143	9,26848218
number_insid Neo- Arc KO	Neo- Arc	KO	8	8	0	20,875	6,17454452
number_insid WT 1	Neo+ Arc	+/-	10	10	0	20,2	10,6332811
number_insid WT 1	Neo+ Arc	WT	14	14	0	24,0714286	9,47437261
number_insid WT 2	Neo- Arc	+/-	8	8	0	26,625	9,14857522
number_insid WT 2	Neo- Arc	WT	7	7	0	29,4285714	14,2811898
number_insid WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	21,5	13,8094171
number_insid NA	Neo+ Arc	+/-	15	15	0	24,6666667	12,2396701

number_nesti Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	9,07142857	6,46248685
number_nesti Neo+ Arc KO	Neo+ Arc	KO	15	15	0	7,93333333	10,2153013
number_nesti Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	5,6	5,77061522
number_nesti Neo- Arc KO	Neo- Arc	+/-	7	7	0	3	3,65148372
number_nesti Neo- Arc KO	Neo- Arc	KO	8	8	0	11,25	6,27352715
number_nesti WT 1	Neo+ Arc	+/-	10	10	0	9,6	4,52646539
number_nesti WT 1	Neo+ Arc	WT	14	14	0	11,5	6,24807663
number_nesti WT 2	Neo- Arc	+/-	8	8	0	10,125	9,04650682
number_nesti WT 2	Neo- Arc	WT	7	7	0	16,2857143	8,4402663
number_nesti WT BI6J	Neo- Arc BI6J	WT	6	6	0	6,66666667	7,08989892
number_nesti NA	Neo+ Arc	+/-	15	15	0	9,66666667	7,0979541
number_outsi Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	24,2142857	9,86975622
number_outsi Neo+ Arc KO	Neo+ Arc	KO	15	15	0	18,2	11,8212883
number_outsi Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	39	11,2915898
number_outsi Neo- Arc KO	Neo- Arc	+/-	7	7	0	24	8,86942313
number_outsi Neo- Arc KO	Neo- Arc	KO	8	8	0	21,125	6,7281392
number_outsi WT 1	Neo+ Arc	+/-	10	10	0	20,3	10,6671875
number_outsi WT 1	Neo+ Arc	WT	14	14	0	24,4285714	9,81924551
number_outsi WT 2	Neo- Arc	+/-	8	8	0	26,875	9,17196816
number_outsi WT 2	Neo- Arc	WT	7	7	0	29,5714286	14,6612544
number_outsi WT BI6J	Neo- Arc BI6J	WT	6	6	0	21,8333333	13,8768392
number_outsi NA	Neo+ Arc	+/-	15	15	0	25,1333333	12,0999803
number_reari Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	60,0714286	47,1274284
number_reari Neo+ Arc KO	Neo+ Arc	KO	15	15	0	62,7333333	43,30204
number_reari Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	103,2	36,2932501
number_reari Neo- Arc KO	Neo- Arc	+/-	7	7	0	87	49,0815648
number_reari Neo- Arc KO	Neo- Arc	KO	8	8	0	90,5	67,8485709
number_reari WT 1	Neo+ Arc	+/-	10	10	0	46	39,8636565
number_reari WT 1	Neo+ Arc	WT	14	14	0	51,1428571	36,1468312
number_reari WT 2	Neo- Arc	+/-	8	8	0	98,375	41,9555462
number_reari WT 2	Neo- Arc	WT	7	7	0	73	46,921921
number_reari WT BI6J	Neo- Arc BI6J	WT	6	6	0	76	21,2790977
number_reari NA	Neo+ Arc	+/-	15	15	0	59,5333333	40,0211849
number_sniffi Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	27,8571429	19,9300976
number_sniffi Neo+ Arc KO	Neo+ Arc	KO	15	15	0	18,4666667	11,7099876
number_sniffi Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	63,6	48,0343627
number_sniffi Neo- Arc KO	Neo- Arc	+/-	7	7	0	21,1428571	17,6203346
number_sniffi Neo- Arc KO	Neo- Arc	KO	8	8	0	14,125	13,6532309
number_sniffi WT 1	Neo+ Arc	+/-	10	10	0	20,7	14,4764176
number_sniffi WT 1	Neo+ Arc	WT	14	14	0	12,0714286	10,8448094
number_sniffi WT 2	Neo- Arc	+/-	8	8	0	15	7,50238057
number_sniffi WT 2	Neo- Arc	WT	7	7	0	21,8571429	11,8100038
number_sniffi WT BI6J	Neo- Arc BI6J	WT	6	6	0	29,5	26,281172
number_sniffi NA	Neo+ Arc	+/-	15	15	0	19,2666667	13,6510945
percentage_d Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	3,23129252	6,44362251
percentage_d Neo+ Arc KO	Neo+ Arc	KO	15	15	0	35,7282251	44,4757563
percentage_d Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	NA	NA
percentage_d Neo- Arc KO	Neo- Arc	+/-	7	7	0	0	0
percentage_d Neo- Arc KO	Neo- Arc	KO	8	8	0	1,78571429	5,05076272
percentage_d WT 1	Neo+ Arc	+/-	10	10	0	0	0
percentage_d WT 1	Neo+ Arc	WT	14	14	0	7,67857143	23,5842248
percentage_d WT 2	Neo- Arc	+/-	8	8	0	5,41666667	11,8103398
percentage_d WT 2	Neo- Arc	WT	7	7	0	1,58730159	4,19960526
percentage_d WT BI6J	Neo- Arc BI6J	WT	6	6	0	NA	NA
percentage_d NA	Neo+ Arc	+/-	15	15	0	2,06466667	5,46701912
percentage_p Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	100	0
percentage_p Neo+ Arc KO	Neo+ Arc	KO	15	15	0	92,6346801	12,1648807
percentage_p Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	NA	NA
percentage_p Neo- Arc KO	Neo- Arc	+/-	7	7	0	100	0
percentage_p Neo- Arc KO	Neo- Arc	KO	8	8	0	100	0
percentage_p WT 1	Neo+ Arc	+/-	10	10	0	99	3,16227766
percentage_p WT 1	Neo+ Arc	WT	14	14	0	98,8092857	4,4552449
percentage_p WT 2	Neo- Arc	+/-	8	8	0	75	46,291005
percentage_p WT 2	Neo- Arc	WT	7	7	0	98,4126984	4,19960526
percentage_p WT BI6J	Neo- Arc BI6J	WT	6	6	0	NA	NA
percentage_p NA	Neo+ Arc	+/-	15	15	0	92,3806667	25,819968
percentage_ti Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	52,0373795	20,5989795
percentage_ti Neo+ Arc KO	Neo+ Arc	KO	15	15	0	52,5920724	30,967325
percentage_ti Neo- Arc BI6J	Neo- Arc BI6J	KO	7	7	0	82,6988567	8,50006559
percentage_ti Neo- Arc KO	Neo- Arc	+/-	7	7	0	58,5937782	25,1044376

percentage_ti Neo- Arc KO	Neo- Arc	KO	8	8	0	51,9056607	27,6977326
percentage_ti WT 1	Neo+ Arc	+/-	10	10	0	29,4513196	17,6884464
percentage_ti WT 1	Neo+ Arc	WT	14	14	0	36,2849224	17,5593306
percentage_ti WT 2	Neo- Arc	+/-	8	8	0	57,7365088	21,7495433
percentage_ti WT 2	Neo- Arc	WT	7	7	0	51,7592796	17,7912376
percentage_ti WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	80,5875005	15,4066659
percentage_ti NA	Neo+ Arc	+/-	15	15	0	46,383957	19,1711538
postparturitic Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	2,14285714	0,88640526
postparturitic Neo+ Arc KO	Neo+ Arc	KO	15	15	0	2,53333333	1,06009883
postparturitic Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	NA	NA
postparturitic Neo- Arc KO	Neo- Arc	+/-	7	7	0	2,5	0,76376262
postparturitic Neo- Arc KO	Neo- Arc	KO	8	8	0	2,75	1,28173989
postparturitic WT 1	Neo+ Arc	+/-	10	10	0	2,6	0,77459667
postparturitic WT 1	Neo+ Arc	WT	14	14	0	3,42857143	0,75592895
postparturitic WT 2	Neo- Arc	+/-	8	8	0	3,28571429	0,75592895
postparturitic WT 2	Neo- Arc	WT	7	7	0	3,35714286	0,74801324
postparturitic WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	NA	NA
postparturitic NA	Neo+ Arc	+/-	15	15	0	2,6	0,89042526
preparturitiior Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	3,03571429	1,21630408
preparturitiior Neo+ Arc KO	Neo+ Arc	KO	15	15	0	2,86666667	1,30201309
preparturitiior Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	NA	NA
preparturitiior Neo- Arc KO	Neo- Arc	+/-	7	7	0	2,71428571	1,46791073
preparturitiior Neo- Arc KO	Neo- Arc	KO	8	8	0	2,625	1,06066017
preparturitiior WT 1	Neo+ Arc	+/-	10	10	0	3,25	0,79056942
preparturitiior WT 1	Neo+ Arc	WT	14	14	0	2,71428571	0,91387353
preparturitiior WT 2	Neo- Arc	+/-	8	8	0	2,6875	1,27999721
preparturitiior WT 2	Neo- Arc	WT	7	7	0	2,92857143	1,01770049
preparturitiior WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	NA	NA
preparturitiior NA	Neo+ Arc	+/-	15	15	0	2,8	1,26491106
test_duration Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	1793,288	13,9254579
test_duration Neo+ Arc KO	Neo+ Arc	KO	15	15	0	1792,67407	11,1898965
test_duration Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	1786,5096	113,97156
test_duration Neo- Arc KO	Neo- Arc	+/-	7	7	0	1798,963	5,53988505
test_duration Neo- Arc KO	Neo- Arc	KO	8	8	0	1794,878	7,95484278
test_duration WT 1	Neo+ Arc	+/-	10	10	0	1793,0529	7,82694221
test_duration WT 1	Neo+ Arc	WT	14	14	0	1788,34164	13,7355234
test_duration WT 2	Neo- Arc	+/-	8	8	0	1791,23863	11,9172563
test_duration WT 2	Neo- Arc	WT	7	7	0	1796,88957	6,86272538
test_duration WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	1664,874	257,908687
test_duration NA	Neo+ Arc	+/-	15	15	0	1793,65953	9,83233613
time_crouchi Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	168,268643	209,823538
time_crouchi Neo+ Arc KO	Neo+ Arc	KO	15	15	0	29,2730667	113,3741
time_crouchi Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	0	0
time_crouchi Neo- Arc KO	Neo- Arc	+/-	7	7	0	132,858429	217,755124
time_crouchi Neo- Arc KO	Neo- Arc	KO	8	8	0	200,9555	292,65913
time_crouchi WT 1	Neo+ Arc	+/-	10	10	0	450,9109	381,030295
time_crouchi WT 1	Neo+ Arc	WT	14	14	0	299,284357	399,945156
time_crouchi WT 2	Neo- Arc	+/-	8	8	0	61,695	101,939343
time_crouchi WT 2	Neo- Arc	WT	7	7	0	26,3481429	34,9510163
time_crouchi WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	5,70866667	13,9833204
time_crouchi NA	Neo+ Arc	+/-	15	15	0	225,811067	365,71656
time_digging Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	119,316714	153,231467
time_digging Neo+ Arc KO	Neo+ Arc	KO	15	15	0	82,8230667	104,795831
time_digging Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	305,2876	154,546119
time_digging Neo- Arc KO	Neo- Arc	+/-	7	7	0	100,412571	114,531969
time_digging Neo- Arc KO	Neo- Arc	KO	8	8	0	26,01575	16,2692953
time_digging WT 1	Neo+ Arc	+/-	10	10	0	36,1397	56,8772032
time_digging WT 1	Neo+ Arc	WT	14	14	0	46,9025714	56,7814651
time_digging WT 2	Neo- Arc	+/-	8	8	0	48,62825	60,2416729
time_digging WT 2	Neo- Arc	WT	7	7	0	29,0751429	47,5853811
time_digging WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	300,173667	194,845622
time_digging NA	Neo+ Arc	+/-	15	15	0	110,2996	103,259278
time_groomir Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	73,9040714	133,967413
time_groomir Neo+ Arc KO	Neo+ Arc	KO	15	15	0	44,9331333	51,89352
time_groomir Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	18,9998	19,1482017
time_groomir Neo- Arc KO	Neo- Arc	+/-	7	7	0	58,984	59,3233946
time_groomir Neo- Arc KO	Neo- Arc	KO	8	8	0	92,996875	89,7317631
time_groomir WT 1	Neo+ Arc	+/-	10	10	0	45,4745	80,5778013
time_groomir WT 1	Neo+ Arc	WT	14	14	0	95,3552857	128,931017
time_groomir WT 2	Neo- Arc	+/-	8	8	0	29,70425	30,2521688

time_groomir WT 2	Neo- Arc	WT	7	7	0	21,3591429	18,3318345
time_groomir WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	42,7485	71,6716109
time_groomir NA	Neo+ Arc	+/-	15	15	0	33,5198667	37,1080596
time_inside_n Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	857,892	367,185023
time_inside_n Neo+ Arc KO	Neo+ Arc	KO	15	15	0	849,082467	557,038593
time_inside_n Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	315,1008	160,723426
time_inside_n Neo- Arc KO	Neo- Arc	+/-	7	7	0	743,815286	452,46838
time_inside_n Neo- Arc KO	Neo- Arc	KO	8	8	0	859,804125	500,393393
time_inside_n WT 1	Neo+ Arc	+/-	10	10	0	1263,1901	318,879552
time_inside_n WT 1	Neo+ Arc	WT	14	14	0	1137,35114	313,651534
time_inside_n WT 2	Neo- Arc	+/-	8	8	0	755,14725	390,655808
time_inside_n WT 2	Neo- Arc	WT	7	7	0	865,293	320,372202
time_inside_n WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	334,88	293,109732
time_inside_n NA	Neo+ Arc	+/-	15	15	0	958,731467	344,031059
time_nesting Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	151,743857	153,711521
time_nesting Neo+ Arc KO	Neo+ Arc	KO	15	15	0	95,6044	130,955286
time_nesting Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	28,3984	26,301024
time_nesting Neo- Arc KO	Neo- Arc	+/-	7	7	0	21,0245714	30,6735796
time_nesting Neo- Arc KO	Neo- Arc	KO	8	8	0	107,88925	69,1701428
time_nesting WT 1	Neo+ Arc	+/-	10	10	0	178,2241	95,2225992
time_nesting WT 1	Neo+ Arc	WT	14	14	0	155,080286	96,9977882
time_nesting WT 2	Neo- Arc	+/-	8	8	0	135,042	144,778457
time_nesting WT 2	Neo- Arc	WT	7	7	0	139,889286	51,0005527
time_nesting WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	55,708	88,7368592
time_nesting NA	Neo+ Arc	+/-	15	15	0	113,060933	74,433013
time_outside Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	934,429714	372,197735
time_outside Neo+ Arc KO	Neo+ Arc	KO	15	15	0	941,2982	552,376557
time_outside Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	1470,7102	81,696861
time_outside Neo- Arc KO	Neo- Arc	+/-	7	7	0	1053,55229	449,5673
time_outside Neo- Arc KO	Neo- Arc	KO	8	8	0	931,169125	495,219099
time_outside WT 1	Neo+ Arc	+/-	10	10	0	527,5569	315,697251
time_outside WT 1	Neo+ Arc	WT	14	14	0	648,8145	313,317069
time_outside WT 2	Neo- Arc	+/-	8	8	0	1034,15675	390,490804
time_outside WT 2	Neo- Arc	WT	7	7	0	929,396143	316,855192
time_outside WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	1329,66317	290,054989
time_outside NA	Neo+ Arc	+/-	15	15	0	832,070667	343,793901
time_sniffing Neo+ Arc KO	Neo+ Arc	+/-	14	14	0	82,1684286	83,5484936
time_sniffing Neo+ Arc KO	Neo+ Arc	KO	15	15	0	29,5408	21,6663307
time_sniffing Neo- Arc Bl6J	Neo- Arc Bl6J	KO	7	7	0	74,7364	65,9633894
time_sniffing Neo- Arc KO	Neo- Arc	+/-	7	7	0	30,5788571	27,3876273
time_sniffing Neo- Arc KO	Neo- Arc	KO	8	8	0	26,282875	30,908998
time_sniffing WT 1	Neo+ Arc	+/-	10	10	0	61,7031	54,7627198
time_sniffing WT 1	Neo+ Arc	WT	14	14	0	23,326	25,7467344
time_sniffing WT 2	Neo- Arc	+/-	8	8	0	23,5615	17,0002915
time_sniffing WT 2	Neo- Arc	WT	7	7	0	34,2325714	16,8882572
time_sniffing WT Bl6J	Neo- Arc Bl6J	WT	6	6	0	39,1606667	37,2526238
time_sniffing NA	Neo+ Arc	+/-	15	15	0	33,8155333	21,89279
E+Maze_cente Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	7,07692308	4,05095747
E+Maze_cente WT	WT	NA	20	10	10	20,1	9,17031825
E+Maze_cente Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	111,730769	92,7270671
E+Maze_cente WT	WT	NA	20	10	10	106,795	75,1075893
E+Maze_close Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	4,61538462	4,95880465
E+Maze_close WT	WT	NA	20	10	10	13,1	5,88396572
E+Maze_close Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	115,161538	94,1910606
E+Maze_close WT	WT	NA	20	10	10	130,255	80,1451018
E+Maze_distar Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	2,14846154	1,32914519
E+Maze_distar WT	WT	NA	20	10	10	3,6197	1,32550559
E+Maze_open Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	8,69230769	5,80781966
E+Maze_open WT	WT	NA	20	10	10	15,4	8,71417478
E+Maze_open Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	73,1153846	67,5918985
E+Maze_open WT	WT	NA	20	10	10	62,94	48,6363563
E+maze_immc Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	72,7307692	62,5122306
E+maze_immc WT	WT	NA	20	10	10	66,075	80,8955264
foodLocalizati Neo+ Arc KO	Neo+ Arc KO	NA	16	12	4	136,5625	92,7915001
foodLocalizati WT	WT	NA	19	7	12	147,473684	99,6880515
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	3,30769231	1,84321347
innateOlfacto WT	WT	NA	18	8	10	2,44444444	1,29352333
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	6,21815385	6,96389407
innateOlfacto WT	WT	NA	18	8	10	5,23583333	6,29623596
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	1,92307692	2,56455124

innateOlfacto WT	WT	NA	20	10	10	1,9	1,94395148
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	4,17546154	8,86076585
innateOlfacto WT	WT	NA	20	10	10	3,37495	5,68422242
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	0,92307692	1,32045058
innateOlfacto WT	WT	NA	20	10	10	1,9	1,44732057
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	1,22569231	2,38112912
innateOlfacto WT	WT	NA	20	10	10	4,06835	5,50200747
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	3,38461538	4,01120226
innateOlfacto WT	WT	NA	20	10	10	2,25	2,67296406
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	6,72338462	6,81767309
innateOlfacto WT	WT	NA	20	10	10	3,2673	3,16592285
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	2,07692308	2,56455124
innateOlfacto WT	WT	NA	20	10	10	1,75	2,42519668
innateOlfacto Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	3,65576923	5,40905419
innateOlfacto WT	WT	NA	20	10	10	4,0415	5,66390073
marble_half_t Neo+ Arc KO	Neo+ Arc KO	NA	13	7	6	1,92307692	0,8623165
marble_half_t WT	WT	NA	9	4	5	2,55555556	1,50923086
marble_more Neo+ Arc KO	Neo+ Arc KO	NA	13	7	6	17	2,41522946
marble_more WT	WT	NA	9	4	5	16,44444444	1,50923086
marble_more Neo+ Arc KO	Neo+ Arc KO	NA	13	7	6	15,0769231	2,62873666
marble_more WT	WT	NA	9	4	5	13,88888889	2,02758751
marble_not_t Neo+ Arc KO	Neo+ Arc KO	NA	13	7	6	3	2,41522946
marble_not_t WT	WT	NA	9	4	5	3,55555556	1,50923086
marble_totall Neo+ Arc KO	Neo+ Arc KO	NA	13	7	6	11,3846154	3,33012666
marble_totall WT	WT	NA	9	4	5	10,66666667	2,6925824
marble_two_t Neo+ Arc KO	Neo+ Arc KO	NA	13	7	6	3,69230769	2,05688338
marble_two_t WT	WT	NA	9	4	5	3,22222222	1,30170828
ms_digging_d Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	4,8952	1,46306845
ms_digging_d Neo- Arc KO	Neo- Arc KO	NA	25	13	12	2,66816	0,91034388
ms_digging_d WT	WT	NA	31	15	16	2,38357766	1,19723475
ms_digging_n Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	30,7	13,2417689
ms_digging_n Neo- Arc KO	Neo- Arc KO	NA	25	13	12	36,68	17,1918585
ms_digging_n WT	WT	NA	31	15	16	41,3548387	20,6825988
ms_digging_ti Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	144,8339	69,1796005
ms_digging_ti Neo- Arc KO	Neo- Arc KO	NA	25	13	12	99,86768	57,6930366
ms_digging_ti WT	WT	NA	31	15	16	99,925871	63,0786932
ms_headShak Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	5,2	2,65832027
ms_headShak Neo- Arc KO	Neo- Arc KO	NA	25	13	12	3,24	2,50466232
ms_headShak WT	WT	NA	31	15	16	2,90322581	1,90359027
ms_immobilit Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	1,6477	3,5706541
ms_immobilit Neo- Arc KO	Neo- Arc KO	NA	25	13	12	0,15664	0,7832
ms_immobilit WT	WT	NA	31	15	16	0	0
ms_immobilit Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	0,2	0,42163702
ms_immobilit Neo- Arc KO	Neo- Arc KO	NA	25	13	12	0,08	0,4
ms_immobilit WT	WT	NA	31	15	16	0	0
ms_immobilit Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	1,6477	3,5706541
ms_immobilit Neo- Arc KO	Neo- Arc KO	NA	25	13	12	0,31332	1,5666
ms_immobilit WT	WT	NA	31	15	16	0	0
ms_rearing Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	54,3	21,5924369
ms_rearing Neo- Arc KO	Neo- Arc KO	NA	25	13	12	59,84	18,8540005
ms_rearing WT	WT	NA	31	15	16	66,9032258	24,9537637
ms_scratchin Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	1,7	1,56702124
ms_scratchin Neo- Arc KO	Neo- Arc KO	NA	25	13	12	1,72	1,96892526
ms_scratchin WT	WT	NA	31	15	16	0,77419355	1,02338254
ms_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	15,36295	4,85735472
ms_selfGroom Neo- Arc KO	Neo- Arc KO	NA	25	13	12	12,2116	6,82963256
ms_selfGroom WT	WT	NA	31	15	16	8,42258065	3,60491297
ms_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	3	1,41421356
ms_selfGroom Neo- Arc KO	Neo- Arc KO	NA	25	13	12	4,24	2,4200551
ms_selfGroom WT	WT	NA	31	15	16	2,51612903	1,91260673
ms_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	10	6	4	49,8724	37,1359942
ms_selfGroom Neo- Arc KO	Neo- Arc KO	NA	25	13	12	51,04108	33,9308879
ms_selfGroom WT	WT	NA	31	15	16	20,9134839	16,8280434
novelObject_t Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	-0,0842177	0,40678097
novelObject_t WT	WT	NA	12	8	4	0,01384455	0,31045292
novelObject_t Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	13,13333333	14,3967589
novelObject_t WT	WT	NA	12	8	4	10,9166667	9,23883437
novelObject_t Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	21,3	31,8479199
novelObject_t WT	WT	NA	12	8	4	12,18333333	10,5395216
novelObject_t Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	12	9,84160266

novelObject_1 WT	WT	NA	12	8	4	7,58333333	4,29499356
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	15,2	12,7433456
novelObject_1 WT	WT	NA	12	8	4	13,025	13,0703777
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	0,03050903	0,57370162
novelObject_1 WT	WT	NA	12	8	4	-0,2036481	0,39272387
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	7,06666667	6,19292992
novelObject_1 WT	WT	NA	12	8	4	12,1666667	10,0257245
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	12,2733333	13,3431345
novelObject_1 WT	WT	NA	12	8	4	17,5166667	21,620522
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	7,73333333	8,89194392
novelObject_1 WT	WT	NA	12	8	4	7,75	6,19567298
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	14,0933333	20,252459
novelObject_1 WT	WT	NA	12	8	4	10	11,5502853
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	0,14252863	0,4443839
novelObject_1 WT	WT	NA	12	8	4	0,02074363	0,32147898
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	13,6	10,7158094
novelObject_1 WT	WT	NA	12	8	4	13,25	8,22551463
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	27,2533333	38,3711362
novelObject_1 WT	WT	NA	12	8	4	26,0833333	18,3189834
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	14,0666667	12,3315314
novelObject_1 WT	WT	NA	12	8	4	13,5	6,92163932
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	40,3866667	38,1126501
novelObject_1 WT	WT	NA	12	8	4	27,5666667	18,820846
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	-0,0666101	0,34563392
novelObject_1 WT	WT	NA	12	8	4	0,16023413	0,33895987
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	15,5333333	13,1304807
novelObject_1 WT	WT	NA	12	8	4	9,91666667	4,66043957
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	39,5866667	41,4758254
novelObject_1 WT	WT	NA	12	8	4	16,7583333	10,8085369
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	17,4	13,5319727
novelObject_1 WT	WT	NA	12	8	4	16	7,83929496
novelObject_1 Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	25,08	16,5799879
novelObject_1 WT	WT	NA	12	8	4	25,8416667	20,8057011
nsf_food_inta Neo+ Arc KO	Neo+ Arc KO	NA	13	7	6	0,25384615	0,05637747
nsf_food_inta WT	WT	NA	8	4	4	0,5125	0,16201852
nsf_food_inta Neo+ Arc KO	Neo+ Arc KO	NA	9	3	6	0,53333333	0,1040833
nsf_food_inta WT	WT	NA	8	4	4	1,1125	0,24016363
nsf_latency_fe Neo+ Arc KO	Neo+ Arc KO	NA	13	7	6	359,076923	106,646192
nsf_latency_fe WT	WT	NA	9	4	5	318,777778	160,218427
olfactoryAvoi Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	0,69230769	2,49615088
olfactoryAvoi WT	WT	NA	20	10	10	0,72005	3,22016149
olfactoryAvoi Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	11,8461538	5,32049737
olfactoryAvoi WT	WT	NA	20	10	10	6,3	4,48506293
olfactoryAvoi Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	24,6436154	36,3518573
olfactoryAvoi WT	WT	NA	20	10	10	9,4794	8,78092642
olfactoryAvoi Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	2,53846154	1,94145069
olfactoryAvoi WT	WT	NA	20	10	10	2,25	1,40955387
olfactoryAvoi Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	36,2353846	43,2549753
olfactoryAvoi WT	WT	NA	20	10	10	44,9874	46,3837376
openField_cer Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	2,80441667	1,30885949
openField_cer WT	WT	NA	8	4	4	2,9885	1,99286233
openField_cer Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	1,3001553	0,21797768
openField_cer WT	WT	NA	8	4	4	1,57410886	0,50132334
openField_cer Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	34,3333333	11,4123803
openField_cer WT	WT	NA	8	4	4	31,125	22,9374148
openField_cer Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	44,5083333	15,791048
openField_cer WT	WT	NA	8	4	4	47,65	36,6774746
openField_coi Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	13,2575	2,79897411
openField_coi WT	WT	NA	8	4	4	16,48425	5,57230393
openField_coi Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	11,573491	10,1765015
openField_coi WT	WT	NA	8	4	4	10,7238292	5,14135144
openField_coi Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	74,25	40,6048027
openField_coi WT	WT	NA	8	4	4	61,625	31,231566
openField_coi Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	517	45,7752613
openField_coi WT	WT	NA	8	4	4	528,1875	35,0610666
openField_dis Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	16,5464167	4,05943958
openField_dis WT	WT	NA	8	4	4	20,0355	7,34477669
openField_im Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	344,233333	51,5705577
openField_im WT	WT	NA	8	4	4	343,9	76,5661432
openField_lin Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	293,75	77,3752662

openField_lin WT	WT	NA	8	4	4	382,375	109,821852
openField_mε Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	0,02758333	0,00673469
openField_mε WT	WT	NA	8	4	4	0,0335	0,01236354
p1_chA_numt Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	20,6666667	7,07535201
p1_chA_numt Neo- Arc KO	Neo- Arc KO	NA	14	7	7	14,8571429	7,20957849
p1_chA_numt WT	WT	NA	26	12	14	21,7692308	11,4028337
p1_chA_timeε Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	187,233333	42,9298229
p1_chA_timeε Neo- Arc KO	Neo- Arc KO	NA	14	7	7	157,042857	72,4925112
p1_chA_timeε WT	WT	NA	26	12	14	162,561538	64,7004487
p1_chB_numt Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	19,5833333	6,68047812
p1_chB_numt Neo- Arc KO	Neo- Arc KO	NA	14	7	7	11,9285714	4,85900094
p1_chB_numt WT	WT	NA	26	12	14	19	9,20869155
p1_chB_timeε Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	163,691667	60,1697819
p1_chB_timeε Neo- Arc KO	Neo- Arc KO	NA	14	7	7	159,242857	99,4196136
p1_chB_timeε WT	WT	NA	26	12	14	149,796154	65,4787201
p1_chamberC Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	109,416667	23,3272308
p1_chamberC Neo- Arc KO	Neo- Arc KO	NA	14	7	7	283,714286	87,4636879
p1_chamberC WT	WT	NA	26	12	14	256,25	120,292887
p1_cyA_numt Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	40,0833333	20,5976977
p1_cyA_numt Neo- Arc KO	Neo- Arc KO	NA	14	7	7	47,7142857	31,6651436
p1_cyA_numt WT	WT	NA	26	12	14	52,8461538	24,5319258
p1_cyA_timeε Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	93,8333333	40,8314347
p1_cyA_timeε Neo- Arc KO	Neo- Arc KO	NA	14	7	7	82,7428571	49,8476867
p1_cyA_timeε WT	WT	NA	26	12	14	83,3730769	42,4466965
p1_cyB_numt Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	30,25	16,1421245
p1_cyB_numt Neo- Arc KO	Neo- Arc KO	NA	14	7	7	52,3571429	30,8560109
p1_cyB_numt WT	WT	NA	26	12	14	46,7692308	27,4157731
p1_cyB_timeε Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	61,7666667	30,675259
p1_cyB_timeε Neo- Arc KO	Neo- Arc KO	NA	14	7	7	86,0357143	62,739763
p1_cyB_timeε WT	WT	NA	26	12	14	85,9307692	63,968941
p1_immobilit Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	1,88333333	4,59185709
p1_immobilit Neo- Arc KO	Neo- Arc KO	NA	14	7	7	41,9142857	35,1276323
p1_immobilit WT	WT	NA	26	12	14	13,8192308	16,576152
p1_preferencε Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	0,41556325	0,18678553
p1_preferencε Neo- Arc KO	Neo- Arc KO	NA	14	7	7	0,49741508	0,26749472
p1_preferencε WT	WT	NA	26	12	14	0,48814505	0,20813313
p2_chM_num Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	8,25	2,13733054
p2_chM_num Neo- Arc KO	Neo- Arc KO	NA	14	7	7	4,64285714	1,78054196
p2_chM_num WT	WT	NA	26	12	14	10,2307692	4,2923904
p2_chM_time Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	307,426917	81,7753029
p2_chM_time Neo- Arc KO	Neo- Arc KO	NA	14	7	7	377,828786	115,577672
p2_chM_time WT	WT	NA	26	12	14	317,603077	95,0501966
p2_chT_numt Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	7,58333333	2,3915888
p2_chT_numt Neo- Arc KO	Neo- Arc KO	NA	14	7	7	3,85714286	1,40642169
p2_chT_numt WT	WT	NA	26	12	14	8,76923077	4,35713385
p2_chT_timeε Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	197,23425	63,7334182
p2_chT_timeε Neo- Arc KO	Neo- Arc KO	NA	14	7	7	177,820857	108,945452
p2_chT_timeε WT	WT	NA	26	12	14	185,986385	91,2791965
p2_chamberC Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	95,3388333	33,881078
p2_chamberC Neo- Arc KO	Neo- Arc KO	NA	14	7	7	44,3503571	39,1838792
p2_chamberC WT	WT	NA	26	12	14	96,4105385	33,6495444
p2_cyM_num Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	30,5833333	13,2490709
p2_cyM_num Neo- Arc KO	Neo- Arc KO	NA	14	7	7	31,2857143	13,1992341
p2_cyM_num WT	WT	NA	26	12	14	48,1538462	25,0354825
p2_cyM_time Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	52,7860833	23,280035
p2_cyM_time Neo- Arc KO	Neo- Arc KO	NA	14	7	7	66,2522857	38,1345816
p2_cyM_time WT	WT	NA	26	12	14	81,5787308	37,9786413
p2_cyT_numt Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	17,0833333	6,24439142
p2_cyT_numt Neo- Arc KO	Neo- Arc KO	NA	14	7	7	11,8571429	5,06658955
p2_cyT_numt WT	WT	NA	26	12	14	16,2307692	6,94151391
p2_cyT_timeS Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	24,2569167	10,9995936
p2_cyT_timeS Neo- Arc KO	Neo- Arc KO	NA	14	7	7	14,3639286	5,65092276
p2_cyT_timeS WT	WT	NA	26	12	14	18,7379231	9,63939461
p2_immobilit Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	5,58541667	5,7685244
p2_immobilit Neo- Arc KO	Neo- Arc KO	NA	14	7	7	28,4383571	36,3144801
p2_immobilit WT	WT	NA	26	12	14	8,87523077	17,4551709
p2_preferencε Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	0,67678233	0,09093937
p2_preferencε Neo- Arc KO	Neo- Arc KO	NA	14	7	7	0,80197228	0,0935761
p2_preferencε WT	WT	NA	26	12	14	0,78627622	0,14090102
p2_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	2	0,95346259

p2_selfGroom Neo- Arc KO	Neo- Arc KO	NA	14	7	7	1,92857143	1,49173547
p2_selfGroom WT	WT	NA	26	12	14	1,38461538	0,94135745
p2_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	50,9426667	33,3634133
p2_selfGroom Neo- Arc KO	Neo- Arc KO	NA	14	7	7	39,787	41,8913099
p2_selfGroom WT	WT	NA	26	12	14	31,9846154	38,5960713
p3_chM_num Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	7,5	2,39317211
p3_chM_num WT	WT	NA	8	4	4	13,75	2,12132034
p3_chM_time Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	234,263083	100,154595
p3_chM_time WT	WT	NA	8	4	4	241,914	71,6900533
p3_chN_num Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	8,41666667	2,96826651
p3_chN_num WT	WT	NA	8	4	4	13,375	2,61520281
p3_chN_time Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	255,547167	103,829752
p3_chN_time WT	WT	NA	8	4	4	241,086	61,8533486
p3_chamberC Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	110,18975	43,2169856
p3_chamberC WT	WT	NA	8	4	4	117	53,5606509
p3_cyM_dura Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	1,238	0,37499139
p3_cyM_dura WT	WT	NA	8	4	4	1,32975	0,37258585
p3_cyM_num Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	17,8333333	9,20309566
p3_cyM_num WT	WT	NA	8	4	4	26,375	15,8288841
p3_cyM_time Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	22,4191667	13,9191487
p3_cyM_time WT	WT	NA	8	4	4	37,8675	30,4516552
p3_cyN_durat Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	2,1405	0,63840917
p3_cyN_durat WT	WT	NA	8	4	4	1,86975	0,41958066
p3_cyN_num Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	26,25	12,2409521
p3_cyN_num WT	WT	NA	8	4	4	31,5	14,1824842
p3_cyN_time Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	55,25125	26,0374167
p3_cyN_time WT	WT	NA	8	4	4	56,122125	21,9152501
p3_immobilit Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	2,12441667	4,12314173
p3_immobilit WT	WT	NA	8	4	4	0,186375	0,52714811
p3_preferenc Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	0,70674137	0,12762723
p3_preferenc WT	WT	NA	8	4	4	0,61920076	0,16714509
p3_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	39,8575833	39,3479704
p3_selfGroom WT	WT	NA	8	4	4	20,3435	14,1046986
p3_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	2,33333333	1,23091491
p3_selfGroom WT	WT	NA	8	4	4	1,5	0,9258201
p3_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	88,7108333	81,5491727
p3_selfGroom WT	WT	NA	8	4	4	35,561125	28,1194503
p4_chMa_nur Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	8,58333333	2,50302847
p4_chMa_nur WT	WT	NA	8	4	4	12,75	2,54950976
p4_chMa_tim Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	189,6565	77,2508742
p4_chMa_tim WT	WT	NA	8	4	4	272,138	97,0659564
p4_chN_num Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	8,33333333	2,80691786
p4_chN_num WT	WT	NA	8	4	4	11,625	3,5831949
p4_chN_time Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	275,9305	99,9902224
p4_chN_time WT	WT	NA	8	4	4	219,26	86,8499808
p4_chamberC Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	134,413	80,3076197
p4_chamberC WT	WT	NA	8	4	4	108,602	23,882021
p4_cyMa_dur Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	1,41033333	0,30219059
p4_cyMa_dur WT	WT	NA	8	4	4	1,372125	0,40866488
p4_cyMa_nun Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	22	9,31274786
p4_cyMa_nun WT	WT	NA	8	4	4	26,625	7,46300399
p4_cyMa_tim Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	31,7540833	15,8247388
p4_cyMa_tim WT	WT	NA	8	4	4	38,1835	23,6502661
p4_cyN_durat Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	1,33133333	0,53610402
p4_cyN_durat WT	WT	NA	8	4	4	1,156625	0,3359111
p4_cyN_num Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	17,1666667	5,55686853
p4_cyN_num WT	WT	NA	8	4	4	22,5	10,743769
p4_cyN_time Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	22,9630833	11,7866741
p4_cyN_time WT	WT	NA	8	4	4	27,008	18,1754493
p4_immobilit Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	6,2925	9,52547995
p4_immobilit WT	WT	NA	8	4	4	0,314	0,88812612
p4_preferenc Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	0,57228236	0,1351576
p4_preferenc WT	WT	NA	8	4	4	0,58973517	0,16658549
p4_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	51,4800833	41,4492212
p4_selfGroom WT	WT	NA	8	4	4	21,969375	17,7338007
p4_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	2,25	0,75377836
p4_selfGroom WT	WT	NA	8	4	4	2	0,9258201
p4_selfGroom Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	112,908417	80,8269002
p4_selfGroom WT	WT	NA	8	4	4	48,937875	51,6385518
residentIntruc Neo+ Arc KO	Neo+ Arc KO	NA	7	0	7	3,07728571	3,63722819

residentIntruc WT	WT	NA	8	0	8	3,977875	6,35061033
residentIntruc Neo+ Arc KO	Neo+ Arc KO	NA	7	0	7	224,629857	72,8783265
residentIntruc WT	WT	NA	8	0	8	258,434	70,8521517
residentIntruc Neo+ Arc KO	Neo+ Arc KO	NA	7	0	7	3,42857143	3,82348632
residentIntruc WT	WT	NA	8	0	8	1,875	2,58774585
residentIntruc Neo+ Arc KO	Neo+ Arc KO	NA	7	0	7	20,8702857	26,8849629
residentIntruc WT	WT	NA	8	0	8	9,350625	11,9786161
residentIntruc Neo+ Arc KO	Neo+ Arc KO	NA	7	0	7	0,74757143	1,10771234
residentIntruc WT	WT	NA	8	0	8	3,462875	2,22038545
residentIntruc Neo+ Arc KO	Neo+ Arc KO	NA	7	0	7	231,725	104,978982
residentIntruc WT	WT	NA	8	0	8	155,639375	104,882015
residentIntruc Neo+ Arc KO	Neo+ Arc KO	NA	7	0	7	3,28571429	6,23736819
residentIntruc WT	WT	NA	8	0	8	6,5	5,23722937
residentIntruc Neo+ Arc KO	Neo+ Arc KO	NA	7	0	7	8,13885714	18,5287161
residentIntruc WT	WT	NA	8	0	8	30,31375	25,9908027
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	0	0
socialMemory WT	WT	NA	9	4	5	0,11111111	0,33333333
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	1,0115	0,74833873
socialMemory WT	WT	NA	9	4	5	1,08733333	0,60724727
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	3,5	3,07059789
socialMemory WT	WT	NA	9	4	5	2,22222222	2,10818511
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	4,47675	3,96677418
socialMemory WT	WT	NA	9	4	5	3,38066667	4,87652968
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	1,065	0,29517646
socialMemory WT	WT	NA	9	4	5	1,56666667	0,70000714
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	20,75	9,77971662
socialMemory WT	WT	NA	9	4	5	28,2222222	11,0428458
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	22,4925	12,4864461
socialMemory WT	WT	NA	9	4	5	48,9362222	36,1582821
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	0,7665	0,6068217
socialMemory WT	WT	NA	9	4	5	0,79344444	0,75421004
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	4,25	5,8002463
socialMemory WT	WT	NA	9	4	5	3,55555556	3,43187671
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	5,00625	8,01193144
socialMemory WT	WT	NA	9	4	5	4,13022222	5,2540062
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	24	7,92824967
socialMemory WT	WT	NA	9	4	5	16,7777778	11,47582
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	2,576	4,10117098
socialMemory WT	WT	NA	9	4	5	3,80755556	6,13259974
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	0,375	0,51754917
socialMemory WT	WT	NA	9	4	5	0,66666667	1
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	2,576	4,10117098
socialMemory WT	WT	NA	9	4	5	5,181	7,86875929
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	6,91925	8,27267833
socialMemory WT	WT	NA	9	4	5	3,16566667	5,46774188
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	0,5	0,53452248
socialMemory WT	WT	NA	9	4	5	0,44444444	0,72648316
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	6,91925	8,27267833
socialMemory WT	WT	NA	9	4	5	3,691	5,85025412
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	2,5	4,53557368
socialMemory WT	WT	NA	9	4	5	1,22222222	2,99072641
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	0,684375	0,51698216
socialMemory WT	WT	NA	9	4	5	0,80488889	1,8560065
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	1,25	1,03509834
socialMemory WT	WT	NA	9	4	5	0,66666667	1,11803399
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	1,192625	1,28456929
socialMemory WT	WT	NA	9	4	5	2,15	5,59872264
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	1,093375	0,359734
socialMemory WT	WT	NA	9	4	5	1,21644444	0,44289477
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	15,75	6,94365075
socialMemory WT	WT	NA	9	4	5	16	8,54400375
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	16,427125	8,29219456
socialMemory WT	WT	NA	9	4	5	22,3807778	15,0799589
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	1,7365	0,86241173
socialMemory WT	WT	NA	9	4	5	1,63444444	1,79712166
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	5,75	5,94618725
socialMemory WT	WT	NA	9	4	5	4	4,41588043
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	11,455375	14,0415795
socialMemory WT	WT	NA	9	4	5	9,13144444	11,3794784
socialMemory Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	13,75	6,73477118

socialMemory_WT	WT	NA	9	4	5	13,5555556	9,01541889
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0	0
socialMemory_WT	WT	NA	9	4	5	4,02111111	6,62017582
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0	0
socialMemory_WT	WT	NA	9	4	5	0,55555556	1,01379376
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0	0
socialMemory_WT	WT	NA	9	4	5	5,68155556	9,02955871
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	12,776125	22,5398887
socialMemory_WT	WT	NA	9	4	5	2,37011111	6,0764955
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0,5	0,75592895
socialMemory_WT	WT	NA	9	4	5	0,22222222	0,44095855
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	17,754875	31,8470513
socialMemory_WT	WT	NA	9	4	5	2,37011111	6,0764955
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0,5	1,41421356
socialMemory_WT	WT	NA	9	4	5	0,44444444	1,01379376
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0,498875	0,54904734
socialMemory_WT	WT	NA	9	4	5	0,23655556	0,47936862
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	1,5	1,41421356
socialMemory_WT	WT	NA	9	4	5	0,66666667	1,32287566
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	1,26	1,43924117
socialMemory_WT	WT	NA	9	4	5	0,70988889	1,43853766
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0,980875	0,28247601
socialMemory_WT	WT	NA	9	4	5	0,98766667	0,52901323
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	17,5	6,92820323
socialMemory_WT	WT	NA	9	4	5	13,8888889	7,57371185
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	18,079625	9,60734073
socialMemory_WT	WT	NA	9	4	5	15,8122222	9,33984642
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0,497625	0,589595
socialMemory_WT	WT	NA	9	4	5	0,59055556	0,60584551
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	2,875	5,19443383
socialMemory_WT	WT	NA	9	4	5	1,44444444	1,33333333
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	2,8235	4,8727113
socialMemory_WT	WT	NA	9	4	5	1,24077778	1,87731882
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	21,875	12,6878739
socialMemory_WT	WT	NA	9	4	5	16,5555556	8,70504324
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0	0
socialMemory_WT	WT	NA	9	4	5	0,26	0,78
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0	0
socialMemory_WT	WT	NA	9	4	5	0,11111111	0,33333333
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0	0
socialMemory_WT	WT	NA	9	4	5	0,26	0,78
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	8,15725	16,6521849
socialMemory_WT	WT	NA	9	4	5	10,3206667	11,6255527
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0,625	0,74402381
socialMemory_WT	WT	NA	9	4	5	0,66666667	0,5
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	14,188125	33,4798203
socialMemory_WT	WT	NA	9	4	5	10,3206667	11,6255527
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	1,5	3,2071349
socialMemory_WT	WT	NA	9	4	5	2,55555556	5,41089436
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0,4135	0,45686978
socialMemory_WT	WT	NA	9	4	5	0,313	0,34506195
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	1	1,41421356
socialMemory_WT	WT	NA	9	4	5	1,55555556	2,00693243
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	0,776375	1,0448669
socialMemory_WT	WT	NA	9	4	5	0,92955556	1,23838939
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	1,151125	0,28515331
socialMemory_WT	WT	NA	9	4	5	1,04988889	0,25943951
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	16,625	6,23211727
socialMemory_WT	WT	NA	9	4	5	22,7777778	13,6269749
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	18,699875	6,66953308
socialMemory_WT	WT	NA	9	4	5	25,9447778	18,4907492
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	2,187875	2,74586913
socialMemory_WT	WT	NA	9	4	5	1,205	0,89621245
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	4,625	2,82526863
socialMemory_WT	WT	NA	9	4	5	2,77777778	2,68224616
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	12,939125	17,8091822
socialMemory_WT	WT	NA	9	4	5	4,56022222	4,87204715
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	14,875	8,54295867
socialMemory_WT	WT	NA	9	4	5	10,6666667	5
socialMemory_Neo+Arc_KO	Neo+Arc_KO	NA	8	4	4	2,047625	5,79155809

socialMemory_WT	WT	NA	9	4	5	2,01077778	6,03233333
socialMemory_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,25	0,70710678
socialMemory_WT	WT	NA	9	4	5	0,11111111	0,33333333
socialMemory_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	4,095375	11,5834697
socialMemory_WT	WT	NA	9	4	5	2,01077778	6,03233333
socialMemory_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	17,119125	11,479196
socialMemory_WT	WT	NA	9	4	5	3,48044444	5,49031634
socialMemory_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	1,25	0,88640526
socialMemory_WT	WT	NA	9	4	5	0,33333333	0,5
socialMemory_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	24,70825	20,7319972
socialMemory_WT	WT	NA	9	4	5	3,48044444	5,49031634
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,78775536	0,36695235
socialOlfactio_WT	WT	NA	8	4	4	1,28433333	0,70646742
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	4,875	2,64237447
socialOlfactio_WT	WT	NA	8	4	4	3,5	2,44948974
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	3,848375	3,56343325
socialOlfactio_WT	WT	NA	8	4	4	4,222375	3,01845197
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,49533333	0,43363778
socialOlfactio_WT	WT	NA	8	4	4	0,6558125	0,43898208
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	2	2,13808994
socialOlfactio_WT	WT	NA	8	4	4	2,25	1,28173989
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	1,248125	1,30432253
socialOlfactio_WT	WT	NA	8	4	4	1,790375	1,50732866
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,3824375	0,56878602
socialOlfactio_WT	WT	NA	8	4	4	0,28127083	0,29678518
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	1,125	1,12599163
socialOlfactio_WT	WT	NA	8	4	4	1,75	1,75254916
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,9115	1,74356007
socialOlfactio_WT	WT	NA	8	4	4	0,87725	1,18715648
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	1,34229375	0,59509589
socialOlfactio_WT	WT	NA	8	4	4	2,09599868	0,60232132
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	4,75	2,71240536
socialOlfactio_WT	WT	NA	8	4	4	9	4,6291005
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	5,3285	2,54845864
socialOlfactio_WT	WT	NA	8	4	4	19,683875	13,1992095
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,20158333	0,37405189
socialOlfactio_WT	WT	NA	8	4	4	1,2946994	0,91665869
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,75	1,16496475
socialOlfactio_WT	WT	NA	8	4	4	4,25	2,96407056
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,50475	1,11968959
socialOlfactio_WT	WT	NA	8	4	4	4,860375	3,31456138
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,17983333	0,29154275
socialOlfactio_WT	WT	NA	8	4	4	0,29814583	0,5779002
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,625	1,06066017
socialOlfactio_WT	WT	NA	8	4	4	1,25	2,18762755
socialOlfactio_Neo+Arc KO	Neo+Arc KO	NA	8	4	4	0,27	0,43278896
socialOlfactio_WT	WT	NA	8	4	4	1,451875	3,48193528
spatialObject_Neo+Arc KO	Neo+Arc KO	NA	15	8	7	-0,1176611	0,32406328
spatialObject_Neo-Arc KO	Neo-Arc KO	NA	16	8	8	0,23524871	0,30208091
spatialObject_WT	WT	NA	28	16	12	0,12228213	0,42789049
spatialObject_Neo+Arc KO	Neo+Arc KO	NA	15	8	7	15,9333333	13,5249329
spatialObject_Neo-Arc KO	Neo-Arc KO	NA	16	8	8	19,0625	10,4592463
spatialObject_WT	WT	NA	28	16	12	21,3214286	26,0370869
spatialObject_Neo+Arc KO	Neo+Arc KO	NA	15	8	7	20,3066667	18,0234952
spatialObject_Neo-Arc KO	Neo-Arc KO	NA	16	8	8	17,075	12,1169028
spatialObject_WT	WT	NA	28	16	12	21,8857143	31,2935293
spatialObject_Neo+Arc KO	Neo+Arc KO	NA	15	8	7	17,2666667	14,0023807
spatialObject_Neo-Arc KO	Neo-Arc KO	NA	16	8	8	26,375	14,4585615
spatialObject_WT	WT	NA	28	16	12	22,8928571	19,8407349
spatialObject_Neo+Arc KO	Neo+Arc KO	NA	15	8	7	18,98	18,4583392
spatialObject_Neo-Arc KO	Neo-Arc KO	NA	16	8	8	27,08125	15,4453539
spatialObject_WT	WT	NA	28	16	12	22,0321429	25,2448756
spatialObject_Neo+Arc KO	Neo+Arc KO	NA	15	8	7	-0,0041315	0,48015381
spatialObject_Neo-Arc KO	Neo-Arc KO	NA	15	7	8	0,08595122	0,61364594
spatialObject_WT	WT	NA	27	15	12	0,13378325	0,4111905
spatialObject_Neo+Arc KO	Neo+Arc KO	NA	15	8	7	12,8	17,2924426
spatialObject_Neo-Arc KO	Neo-Arc KO	NA	16	8	8	6,4375	7,27524341
spatialObject_WT	WT	NA	28	16	12	10,6785714	10,317384
spatialObject_Neo+Arc KO	Neo+Arc KO	NA	15	8	7	18,7333333	25,3059752
spatialObject_Neo-Arc KO	Neo-Arc KO	NA	16	8	8	9,2875	17,4650842

spatialObject_WT	WT	NA	28	16	12	12,4892857	11,8594341
spatialObject_Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	10	12
spatialObject_Neo- Arc KO	Neo- Arc KO	NA	16	8	8	10,6875	18,5534139
spatialObject_WT	WT	NA	28	16	12	11,7857143	6,60166726
spatialObject_Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	15,8	20,8422648
spatialObject_Neo- Arc KO	Neo- Arc KO	NA	16	8	8	12,41875	21,1106361
spatialObject_WT	WT	NA	28	16	12	13,4642857	9,73322733
spatialObject_Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	-0,3117517	0,46469935
spatialObject_Neo- Arc KO	Neo- Arc KO	NA	14	6	8	0,20661168	0,74883882
spatialObject_WT	WT	NA	26	14	12	0,11594323	0,44915643
spatialObject_Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	10,6666667	23,3656239
spatialObject_Neo- Arc KO	Neo- Arc KO	NA	14	6	8	2,64285714	3,27242895
spatialObject_WT	WT	NA	26	14	12	9,03846154	6,90785506
spatialObject_Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	21,8	55,484335
spatialObject_Neo- Arc KO	Neo- Arc KO	NA	14	6	8	2,97857143	4,71595958
spatialObject_WT	WT	NA	26	14	12	10,0653846	9,44821432
spatialObject_Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	4,2	4,26279586
spatialObject_Neo- Arc KO	Neo- Arc KO	NA	14	6	8	4,07142857	4,85900094
spatialObject_WT	WT	NA	26	14	12	10,2692308	7,13054103
spatialObject_Neo+ Arc KO	Neo+ Arc KO	NA	15	8	7	9,31333333	20,2218011
spatialObject_Neo- Arc KO	Neo- Arc KO	NA	14	6	8	9,64285714	21,0564339
spatialObject_WT	WT	NA	26	14	12	18,3538462	23,6641202
stringTest_hin Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	33,8461538	32,472671
stringTest_hin WT	WT	NA	20	10	10	21,8	28,5539194
stringTest_lati Neo+ Arc KO	Neo+ Arc KO	NA	13	9	4	61,6923077	42,8045648
stringTest_lati WT	WT	NA	20	10	10	27,55	33,3631928
tubeTest_win: Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	3	1,19522861
tubeTest_win: WT	WT	NA	8	4	4	1	0,75592895
tubeTest_win: Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	3,375	0,74402381
tubeTest_win: WT	WT	NA	8	4	4	0,625	0,91612538
tubeTest_win: Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	2,375	1,30247018
tubeTest_win: WT	WT	NA	8	4	4	1,5	1,19522861
tubeTest_win: Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	1,125	0,83452296
tubeTest_win: WT	WT	NA	8	4	4	1	1,06904497
tubeTest_win: Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	0,75	0,70710678
tubeTest_win: WT	WT	NA	8	4	4	0,875	0,83452296
tubeTest_win: Neo+ Arc KO	Neo+ Arc KO	NA	8	4	4	0,75	0,70710678
tubeTest_win: WT	WT	NA	8	4	4	1	1,06904497
ymazeMemor Neo+ Arc KO	Neo+ Arc KO	NA	13	6	7	5,30769231	2,86893172
ymazeMemor WT	WT	NA	16	8	8	9,3125	3,55375388
ymazeMemor Neo+ Arc KO	Neo+ Arc KO	NA	13	6	7	76,7153846	57,1758376
ymazeMemor WT	WT	NA	16	8	8	73,54375	39,4646165
ymaze_altern Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	22,83333333	6,88652615
ymaze_altern WT	WT	NA	8	4	4	32,25	6,27352715
ymaze_perce Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	35,3829697	15,9508978
ymaze_perce WT	WT	NA	8	4	4	33,9745077	9,45659493
ymaze_perce Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	3,54689367	7,62242292
ymaze_perce WT	WT	NA	8	4	4	1,79147879	2,54887561
ymaze_perce Neo+ Arc KO	Neo+ Arc KO	NA	12	6	6	61,0701366	18,0371451
ymaze_perce WT	WT	NA	8	4	4	64,2340135	8,96198741

var_s1	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
duration_croci	value_s1	Neo+ Arc KO	WT 1		15	14 3,33172388	0,0008631	0,01294648	*
duration_nest	value_s1	Neo+ Arc KO	WT 1		15	14 3,18581997	0,00144344	0,02165166	*
latency_first	value_s1	Neo+ Arc KO	WT 1		15	14 -4,3165835	1,58E-05	0,00023769	***
latency_fourth	value_s1	Neo+ Arc KO	WT 1		15	14 -3,6437841	0,00026866	0,00376122	**
latency_full_n	value_s1	Neo+ Arc KO	WT 1		15	13 -3,5687275	0,00035872	0,00538079	**
latency_second	value_s1	Neo+ Arc KO	WT 1		15	14 -4,4833624	7,35E-06	0,00011021	***
latency_third	value_s1	Neo+ Arc KO	WT 1		15	14 -4,3863723	1,15E-05	0,00017289	***
number_crou	value_s1	Neo+ Arc KO	WT 1		15	14 3,23821963	0,00120278	0,01804173	*
time_crouching	value_s1	Neo+ Arc KO	WT 1		15	14 3,35472984	0,00079443	0,01191638	*
E+Maze_center	value_s1	Neo+ Arc KO	WT		13	20 3,80222617	0,0001434	0,0001434	***
E+Maze_close	value_s1	Neo+ Arc KO	WT		13	20 3,47057508	0,00051935	0,00051935	***
ms_digging_d	value_s1	Neo+ Arc KO	WT		10	31 -4,5352244	5,75E-06	1,73E-05	****
ms_selfGroom	value_s1	Neo+ Arc KO	WT		10	31 -3,6855148	0,00022824	0,00068472	***
ms_selfGroom	value_s1	Neo- Arc KO	WT		25	31 -3,56004	0,0003708	0,0011124	**
ms_selfGroom	value_s1	Neo+ Arc KO	WT		10	31 -2,6772379	0,00742319	0,01484638	*
nsf_food_inta	value_s1	Neo+ Arc KO	WT		9	8 3,51619629	0,00043778	0,00043778	***
olfactoryAvoi	value_s1	Neo+ Arc KO	WT		13	20 -3,0421709	0,00234878	0,00234878	**
p1_chamberC	value_s1	Neo+ Arc KO	WT		12	26 3,32102197	0,00089688	0,00179377	**
p1_immobilit	value_s1	Neo- Arc KO	WT		14	26 -2,9512693	0,00316471	0,00632942	**
p1_immobilit	value_s1	Neo+ Arc KO	WT		12	26 2,50071647	0,01239424	0,01239424	*
p2_chM_num	value_s1	Neo- Arc KO	WT		14	26 4,34913141	1,37E-05	4,10E-05	****
p2_chT_num	value_s1	Neo- Arc KO	WT		14	26 3,96852771	7,23E-05	0,00021695	***
p2_chamberC	value_s1	Neo- Arc KO	WT		14	26 3,61250867	0,00030325	0,00090975	***
p3_chM_num	value_s1	Neo+ Arc KO	WT		12	8 3,4191843	0,00062809	0,00062809	***
socialOlfactio	value_s1	Neo+ Arc KO	WT		8	8 2,94058818	0,0032759	0,0032759	**
socialOlfactio	value_s1	Neo+ Arc KO	WT		8	8 3,04041443	0,00236253	0,00236253	**
spatialObject_	value_s1	Neo- Arc KO	WT		14	26 3,42346782	0,00061828	0,00185483	**
spatialObject_	value_s1	Neo- Arc KO	WT		14	26 2,88168591	0,00395554	0,01059403	*
spatialObject_	value_s1	Neo+ Arc KO	WT		15	26 2,9172485	0,00353134	0,01059403	*
tubeTest_win	value_s1	Neo+ Arc KO	WT		8	8 -3,3506172	0,00080632	0,00080632	***
ymazeMemor	value_s1	Neo+ Arc KO	WT		13	16 3,12939721	0,00175165	0,00175165	**

Table S2. Mean and statistics of social interaction in the Live Mouse Tracker

event	expe	day	genotype	line	genotype_mother	treatment	KO_postweaning	N	n_females	n_males	mean	sd
Cuddling	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	39,75	43,5943472
Cuddling	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	24,3694444	7,58989837
Cuddling	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	39,6807018	12,7585716
Cuddling	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	40,1866667	11,331476
Cuddling	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	27,4791667	15,7791699
Cuddling	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	26,2944444	10,5308861
Cuddling	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	37,4315789	22,0398922
Cuddling	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	35,6177778	19,5481086
Cuddling	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	22,5875	4,74061842
Cuddling	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	27	9,00188532
Cuddling	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	54,4280702	37,1399211
Cuddling	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	37,6311111	19,9937152
Cuddling	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	31,9395833	17,1466192
Cuddling	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	65,8333333	38,3277624
Cuddling	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	52,1684211	49,5228809
Cuddling	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	43,9511111	19,0957066
Cuddling	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	36,31875	15,014837
Cuddling	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	45,6194444	21,8807071
Cuddling	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	46,6894737	38,5154868
Cuddling	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	24,7377778	12,5670953
Cuddling	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	31	15	16	23,8623656	20,0112963
Cuddling	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	30	15	15	20,1888889	8,97866067
Cuddling	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	31	15	16	45,8430108	14,9740224
Cuddling	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	30	15	15	48,8133333	16,3810296
Cuddling	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	31	15	16	83,2301075	39,1805029
Cuddling	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	30	15	15	50,6555556	17,1749201
Cuddling	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	18	11	7	11,9462963	4,69130943
Cuddling	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	17	11	6	8	2,51749435
Cuddling	social enrichment	1	KO	Neo+ Arc	NA	NA	enriched	13	6	7	12,1102564	5,95752535
Cuddling	social enrichment	1	KO	Neo+ Arc	NA	NA	non-social	32	22	10	5,35416667	1,90156981
Cuddling	social enrichment	1	WT	Neo+ Arc	NA	NA	enriched	7	5	2	10,6	5,65240034
Cuddling	social enrichment	1	WT	Neo+ Arc	NA	NA	social	48	31	17	7,1777778	3,78683381
Cuddling	social enrichment	2	+/-	Neo+ Arc	NA	NA	enriched	16	9	7	30,2104167	9,46592109
Cuddling	social enrichment	2	+/-	Neo+ Arc	NA	NA	social	8	3	5	33,8791667	10,4523247
Cuddling	social enrichment	2	KO	Neo+ Arc	NA	NA	enriched	12	5	7	29,0972222	10,2583738
Cuddling	social enrichment	2	KO	Neo+ Arc	NA	NA	non-social	24	12	12	30,9555556	12,9829679
Cuddling	social enrichment	2	WT	Neo+ Arc	NA	NA	enriched	7	5	2	34,9952381	10,306029
Cuddling	social enrichment	2	WT	Neo+ Arc	NA	NA	social	43	26	17	31,820155	13,4404903
Cuddling	social enrichment	3	+/-	Neo+ Arc	NA	NA	enriched	17	10	7	30,8803922	24,0226486
Cuddling	social enrichment	3	+/-	Neo+ Arc	NA	NA	social	10	5	5	28,59	16,2945196
Cuddling	social enrichment	3	KO	Neo+ Arc	NA	NA	enriched	12	5	7	24,9333333	7,1055676
Cuddling	social enrichment	3	KO	Neo+ Arc	NA	NA	non-social	24	12	12	27,9319444	9,03356853
Cuddling	social enrichment	3	WT	Neo+ Arc	NA	NA	enriched	7	5	2	28,7809524	11,1194334
Cuddling	social enrichment	3	WT	Neo+ Arc	NA	NA	social	39	24	15	30,1213675	12,7332587
FollowZone	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	11	7	4	1,26363636	1,05392964
FollowZone	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	8	7	1	1,375	1,26838855
FollowZone	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	2,97894737	2,36995626
FollowZone	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	3,74222222	2,86690106
FollowZone	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	12	8	4	0,96388889	0,49019854
FollowZone	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	11	8	3	1,4	0,8566083
FollowZone	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	15	7	8	1,12	1,06434271
FollowZone	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	13	7	6	1,64615385	1,17980997
FollowZone	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	8	5	3	1,375	0,88402938
FollowZone	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	9	6	3	1,64074074	1,46095267
FollowZone	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	15	8	7	1,67111111	1,96569252
FollowZone	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	11	5	6	1,94848485	2,09031436
FollowZone	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	12	8	4	1,40555556	1,51369728
FollowZone	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	10	7	3	1,54333333	1,01032326
FollowZone	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	15	7	8	2,54666667	3,05761604
FollowZone	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	12	6	6	1,825	1,48031699
FollowZone	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	14	9	5	1,48571429	0,98403619
FollowZone	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	10	7	3	2,35666667	1,70388445
FollowZone	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	18	8	10	2,44259259	1,87918789
FollowZone	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	14	7	7	2,66428571	3,22793534
FollowZone	genotype differences	1	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	10,6104167	4,29345119
FollowZone	genotype differences	1	+/-	Neo+ Arc	-/-	NA	NA	28	16	12	9,96428571	3,57894999
FollowZone	genotype differences	1	KO	Neo+ Arc	NA	NA	KO control	13	6	7	3,92820513	2,45235511
FollowZone	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	13	5	8	0,50769231	0,27893775
FollowZone	genotype differences	1	WT	Neo+ Arc	NA	NA	WT control	19	8	11	8,01578947	4,43737449
FollowZone	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	21	12	9	1,03968254	0,77313353
FollowZone	genotype differences	2	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	16,2770833	10,1815859
FollowZone	genotype differences	2	+/-	Neo+ Arc	-/-	NA	NA	27	15	12	20,308642	7,49732484
FollowZone	genotype differences	2	KO	Neo+ Arc	NA	NA	KO control	12	6	6	8,99166667	6,41694608
FollowZone	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	20	12	8	1,145	0,77695424
FollowZone	genotype differences	2	WT	Neo+ Arc	NA	NA	WT control	18	8	10	14,612963	8,86168324
FollowZone	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	24	11	13	1,84027778	1,25393985
FollowZone	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	20	7	13	1,06166667	1,09940308
FollowZone	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	24	13	11	1,89861111	1,70397317
FollowZone	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	13	8	5	1,3025641	0,89695592
FollowZone	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	9	8	1	2,02592593	1,19335868
FollowZone	social enrichment	1	KO	Neo+ Arc	NA	NA	enriched	8	3	5	0,87916667	0,68566675
FollowZone	social enrichment	1	KO	Neo+ Arc	NA	NA	non-social	10	5	5	0,57333333	0,26703678
FollowZone	social enrichment	1	WT	Neo+ Arc	NA	NA	enriched	4	3	1	0,55	0,26736021
FollowZone	social enrichment	1	WT	Neo+ Arc	NA	NA	social	37	25	12	0,81261261	0,5400818
FollowZone	social enrichment	2	+/-	Neo+ Arc	NA	NA	enriched	14	8	6	2,70714286	2,0948524
FollowZone	social enrichment	2	+/-	Neo+ Arc	NA	NA	social	8	3	5	1,82083333	1,36113136
FollowZone	social enrichment	2	KO	Neo+ Arc	NA	NA	enriched	11	5	6	1,08484848	0,8949691
FollowZone	social enrichment	2	KO	Neo+ Arc	NA	NA	non-social	22	11	11	2,02727273	1,40763738
FollowZone	social enrichment	2	WT	Neo+ Arc	NA	NA	enriched	6	4	2	1,59444444	0,71784141

FollowZone	social enrichment	2	WT	Neo+ Arc	NA	NA	social	41	26	15	2,21138211	2,02922549
FollowZone	social enrichment	3	+/-	Neo+ Arc	NA	NA	enriched	17	10	7	2,18235294	1,35739321
FollowZone	social enrichment	3	+/-	Neo+ Arc	NA	NA	social	8	5	3	2,54583333	2,84431695
FollowZone	social enrichment	3	KO	Neo+ Arc	NA	NA	enriched	12	5	7	1,83333333	0,83714281
FollowZone	social enrichment	3	KO	Neo+ Arc	NA	NA	non-social	17	10	7	1,10392157	0,84966352
FollowZone	social enrichment	3	WT	Neo+ Arc	NA	NA	enriched	7	5	2	2,00952381	2,54999741
FollowZone	social enrichment	3	WT	Neo+ Arc	NA	NA	social	33	21	12	2,58888889	1,98556714
Make contact	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	25,7958333	11,6763825
Make contact	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	30,2527778	12,0532443
Make contact	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	31,3929825	15,6790085
Make contact	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	35,5666667	16,5797639
Make contact	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	31,7958333	14,2700301
Make contact	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	36,3861111	9,50813005
Make contact	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	29,2929825	13,5387855
Make contact	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	32,0333333	18,277152
Make contact	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	31,7208333	12,6628876
Make contact	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	33,7388889	8,81244338
Make contact	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	29,7087719	17,2282349
Make contact	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	28,4466667	14,2267678
Make contact	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	29,8	11,7939658
Make contact	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	37,2222222	13,6469505
Make contact	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	36,5368421	22,1347052
Make contact	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	36,7555556	20,5900449
Make contact	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	42,2416667	31,7500458
Make contact	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	46,6638889	20,4603359
Make contact	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	38,5157895	25,7726225
Make contact	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	29,7	25,0293447
Make contact	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	31	15	16	20,5150538	10,0456766
Make contact	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	30	15	15	22,7344444	15,149552
Make contact	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	31	15	16	26,5817204	11,8094966
Make contact	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	30	15	15	36,3488889	12,8847492
Make contact	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	31	15	16	30,2516129	13,7200336
Make contact	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	30	15	15	35,8722222	15,0663566
Make contact	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	18	11	7	18,3592593	8,49054496
Make contact	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	17	11	6	11,2254902	7,8255061
Make contact	social enrichment	1	KO	Neo+ Arc	NA	NA	enriched	13	6	7	10,6512821	7,25968849
Make contact	social enrichment	1	KO	Neo+ Arc	NA	NA	non-social	34	22	12	7,19019608	4,61120382
Make contact	social enrichment	1	WT	Neo+ Arc	NA	NA	enriched	7	5	2	11,4857143	3,32954547
Make contact	social enrichment	1	WT	Neo+ Arc	NA	NA	social	48	31	17	12,7763889	7,08898176
Make contact	social enrichment	2	+/-	Neo+ Arc	NA	NA	enriched	16	9	7	20,3666667	8,47702778
Make contact	social enrichment	2	+/-	Neo+ Arc	NA	NA	social	8	3	5	18,0416667	8,77038216
Make contact	social enrichment	2	KO	Neo+ Arc	NA	NA	enriched	12	5	7	17,7777778	6,68576557
Make contact	social enrichment	2	KO	Neo+ Arc	NA	NA	non-social	24	12	12	16,4152778	6,16913761
Make contact	social enrichment	2	WT	Neo+ Arc	NA	NA	enriched	7	5	2	18,4761905	8,20170972
Make contact	social enrichment	2	WT	Neo+ Arc	NA	NA	social	43	26	17	21,075969	8,05142968
Make contact	social enrichment	3	+/-	Neo+ Arc	NA	NA	enriched	17	10	7	21,6431373	8,10009229
Make contact	social enrichment	3	+/-	Neo+ Arc	NA	NA	social	10	5	5	18,7233333	8,14437699
Make contact	social enrichment	3	KO	Neo+ Arc	NA	NA	enriched	12	5	7	17,4472222	5,83572173
Make contact	social enrichment	3	KO	Neo+ Arc	NA	NA	non-social	24	12	12	19,1666667	8,35528702
Make contact	social enrichment	3	WT	Neo+ Arc	NA	NA	enriched	7	5	2	19,6857143	4,8196687
Make contact	social enrichment	3	WT	Neo+ Arc	NA	NA	social	39	24	15	21,0461538	10,370326
Move in contact	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	50,0375	42,4955481
Move in contact	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	39,3305556	9,33452869
Move in contact	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	77,0982456	35,0427155
Move in contact	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	87,0466667	33,9724534
Move in contact	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	48,13125	21,5354951
Move in contact	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	49	9,77110769
Move in contact	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	44,9210526	26,1966241
Move in contact	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	50,9644444	24,4937908
Move in contact	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	47,4041667	15,8085297
Move in contact	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	60,1111111	20,3677867
Move in contact	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	52,8052632	34,371996
Move in contact	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	50,8466667	29,8483995
Move in contact	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	59,425	30,3735009
Move in contact	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	90,5555556	40,5242846
Move in contact	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	15	8	7	58,76	36,2997752
Move in contact	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	51,5333333	29,6976296
Move in contact	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	73,175	23,6063064
Move in contact	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	76,3888889	27,8523935
Move in contact	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	18	7	11	62,9962963	43,4998233
Move in contact	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	14	7	7	48,1928571	24,3080803
Move in contact	genotype differences	1	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	37,9385417	10,198412
Move in contact	genotype differences	1	+/-	Neo+ Arc	-/-	NA	NA	28	16	12	36,8166667	8,38011314
Move in contact	genotype differences	1	KO	Neo+ Arc	NA	NA	KO control	13	6	7	17,3615385	3,68525204
Move in contact	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	31	15	16	28,7215054	12,2796898
Move in contact	genotype differences	1	WT	Neo+ Arc	NA	NA	WT control	19	8	11	29,2175439	14,0906298
Move in contact	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	30	15	15	29,1955556	12,193682
Move in contact	genotype differences	2	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	56,8875	13,5864252
Move in contact	genotype differences	2	+/-	Neo+ Arc	-/-	NA	NA	27	15	12	67,3234568	14,8404069
Move in contact	genotype differences	2	KO	Neo+ Arc	NA	NA	KO control	12	6	6	34,3111111	8,70655545
Move in contact	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	31	15	16	54,455914	19,2329489
Move in contact	genotype differences	2	WT	Neo+ Arc	NA	NA	WT control	18	8	10	48,0314815	16,8484381
Move in contact	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	30	15	15	62,9966667	19,1139101
Move in contact	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	31	15	16	64,8172043	25,280616
Move in contact	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	30	15	15	75,7966667	31,0106153
Move in contact	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	18	11	7	23,5518519	5,82521252
Move in contact	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	17	11	6	17,9568627	6,47965582
Move in contact	social enrichment	1	KO	Neo+ Arc	NA	NA	enriched	13	6	7	18,9282051	6,12973696
Move in contact	social enrichment	1	KO	Neo+ Arc	NA	NA	non-social	34	22	12	10,2862745	4,93405071
Move in contact	social enrichment	1	WT	Neo+ Arc	NA	NA	enriched	7	5	2	18,1238095	4,07475127

Move in contact	social enrichment	1	WT	Neo+ Arc	NA	NA	social	48	31	17	16,5666667	6,77336949
Move in contact	social enrichment	2	+/-	Neo+ Arc	NA	NA	enriched	16	9	7	60,01875	19,8206027
Move in contact	social enrichment	2	+/-	Neo+ Arc	NA	NA	social	8	3	5	62,1416667	22,9235496
Move in contact	social enrichment	2	KO	Neo+ Arc	NA	NA	enriched	12	5	7	44,1833333	18,225005
Move in contact	social enrichment	2	KO	Neo+ Arc	NA	NA	non-social	24	12	12	50,7708333	19,7094776
Move in contact	social enrichment	2	WT	Neo+ Arc	NA	NA	enriched	7	5	2	53,5095238	28,547444
Move in contact	social enrichment	2	WT	Neo+ Arc	NA	NA	social	43	26	17	54,455814	19,6327158
Move in contact	social enrichment	3	+/-	Neo+ Arc	NA	NA	enriched	17	10	7	62,527451	27,2662317
Move in contact	social enrichment	3	+/-	Neo+ Arc	NA	NA	social	11	6	5	51,4333333	10,4199275
Move in contact	social enrichment	3	KO	Neo+ Arc	NA	NA	enriched	12	5	7	36,3666667	6,63962698
Move in contact	social enrichment	3	KO	Neo+ Arc	NA	NA	non-social	24	12	12	42,0236111	13,6700649
Move in contact	social enrichment	3	WT	Neo+ Arc	NA	NA	enriched	7	5	2	49,1047619	25,1565132
Move in contact	social enrichment	3	WT	Neo+ Arc	NA	NA	social	39	24	15	57,5401709	23,7200105
Movelsolated_time	genotype differences	1	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	244,496875	42,5880453
Movelsolated_time	genotype differences	1	+/-	Neo+ Arc	-/-	NA	NA	28	16	12	236,652381	52,2268008
Movelsolated_time	genotype differences	1	KO	Neo+ Arc	NA	NA	KO control	13	6	7	213,792308	34,9786659
Movelsolated_time	genotype differences	1	WT	Neo+ Arc	NA	NA	WT control	19	8	11	255,410526	51,0387532
Movelsolated_time	genotype differences	2	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	182,773958	44,8407782
Movelsolated_time	genotype differences	2	+/-	Neo+ Arc	-/-	NA	NA	27	15	12	194,485185	39,8808903
Movelsolated_time	genotype differences	2	KO	Neo+ Arc	NA	NA	KO control	12	6	6	180,991667	47,560813
Movelsolated_time	genotype differences	2	WT	Neo+ Arc	NA	NA	WT control	18	8	10	215,781481	60,6077523
Nose contact	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	43,4145833	31,5344608
Nose contact	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	42,6666667	16,961543
Nose contact	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	61,7157895	15,736889
Nose contact	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	72,0911111	16,3980906
Nose contact	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	40,0020833	14,704363
Nose contact	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	42,7083333	12,6377751
Nose contact	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	59,645614	21,6133452
Nose contact	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	60,2444444	13,5883217
Nose contact	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	40,0729167	11,2290972
Nose contact	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	50,9083333	24,0062918
Nose contact	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	67,122807	29,6052945
Nose contact	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	58,9733333	16,3511623
Nose contact	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	48,7958333	19,5415943
Nose contact	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	71,7388889	32,9836655
Nose contact	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	78,8175439	26,3564488
Nose contact	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	68,1066667	19,7243231
Nose contact	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	58,5208333	20,4642086
Nose contact	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	64,2555556	25,4743616
Nose contact	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	71,9754386	29,5684785
Nose contact	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	52,3711111	19,564573
Nose contact	genotype differences	1	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	30,43125	8,01673848
Nose contact	genotype differences	1	+/-	Neo+ Arc	-/-	NA	NA	28	16	12	30,2964286	8,4462003
Nose contact	genotype differences	1	KO	Neo+ Arc	NA	NA	KO control	13	6	7	15,0666667	6,68259209
Nose contact	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	31	15	16	31,2903226	16,2529546
Nose contact	genotype differences	1	WT	Neo+ Arc	NA	NA	WT control	19	8	11	21,5596491	11,8505018
Nose contact	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	30	15	15	27,0233333	8,92263105
Nose contact	genotype differences	2	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	63,890625	17,8339579
Nose contact	genotype differences	2	+/-	Neo+ Arc	-/-	NA	NA	27	15	12	64,8382716	18,0546599
Nose contact	genotype differences	2	KO	Neo+ Arc	NA	NA	KO control	12	6	6	36,2277778	11,4317901
Nose contact	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	31	15	16	56,8397849	10,9005077
Nose contact	genotype differences	2	WT	Neo+ Arc	NA	NA	WT control	18	8	10	48,5685185	16,5476514
Nose contact	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	30	15	15	68,2811111	19,4717374
Nose contact	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	31	15	16	78,8387097	26,2839581
Nose contact	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	30	15	15	66,67	17,3448555
Nose contact	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	18	11	7	17,3425926	6,74319609
Nose contact	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	17	11	6	12,327451	5,46368358
Nose contact	social enrichment	1	KO	Neo+ Arc	NA	NA	enriched	13	6	7	13,8410256	6,2049585
Nose contact	social enrichment	1	KO	Neo+ Arc	NA	NA	non-social	34	22	12	7,19509804	2,8613897
Nose contact	social enrichment	1	WT	Neo+ Arc	NA	NA	enriched	7	5	2	14,8857143	3,95197359
Nose contact	social enrichment	1	WT	Neo+ Arc	NA	NA	social	48	31	17	11,4055556	3,73857493
Nose contact	social enrichment	2	+/-	Neo+ Arc	NA	NA	enriched	16	9	7	43,3416667	13,1721058
Nose contact	social enrichment	2	+/-	Neo+ Arc	NA	NA	social	8	3	5	47,4416667	18,2950835
Nose contact	social enrichment	2	KO	Neo+ Arc	NA	NA	enriched	12	5	7	37,475	9,28735564
Nose contact	social enrichment	2	KO	Neo+ Arc	NA	NA	non-social	24	12	12	40,0666667	12,7299601
Nose contact	social enrichment	2	WT	Neo+ Arc	NA	NA	enriched	7	5	2	49,2333333	13,2188698
Nose contact	social enrichment	2	WT	Neo+ Arc	NA	NA	social	43	26	17	46,8682171	16,6001912
Nose contact	social enrichment	3	+/-	Neo+ Arc	NA	NA	enriched	17	10	7	41,6784314	18,6238607
Nose contact	social enrichment	3	+/-	Neo+ Arc	NA	NA	social	11	6	5	42,7272727	13,7657451
Nose contact	social enrichment	3	KO	Neo+ Arc	NA	NA	enriched	12	5	7	33,1638889	8,34736344
Nose contact	social enrichment	3	KO	Neo+ Arc	NA	NA	non-social	24	12	12	34,9861111	8,62809654
Nose contact	social enrichment	3	WT	Neo+ Arc	NA	NA	enriched	7	5	2	41,2047619	21,7062581
Nose contact	social enrichment	3	WT	Neo+ Arc	NA	NA	social	39	24	15	42,9264957	16,1508626
Periphery Zone	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	506,81875	57,0924448
Periphery Zone	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	486,383333	41,5859327
Periphery Zone	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	506,561404	38,5894892
Periphery Zone	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	515,006667	35,1001429
Periphery Zone	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	503,204167	54,3151011
Periphery Zone	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	478,338889	61,854722
Periphery Zone	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	541,140351	25,6869679
Periphery Zone	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	514,566667	52,9506794
Periphery Zone	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	470,64375	53,5972107
Periphery Zone	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	485,802778	56,8661062
Periphery Zone	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	520,212281	58,8471458
Periphery Zone	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	516,68	43,2995579
Periphery Zone	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	477,60625	58,257916
Periphery Zone	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	530,177778	28,2172321
Periphery Zone	OT treatment	21	NA	Neo+ Arc	NA	NA	NA	3	0	0	0,03333333	0
Periphery Zone	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	552,04386	35,4006069
Periphery Zone	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	529,868889	39,2695376

Periphery Zone	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	502,145833	51,0251077
Periphery Zone	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	530,202778	39,9324998
Periphery Zone	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	543,731579	30,0531268
Periphery Zone	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	459,18	103,457006
Rearing	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	15	9	6	5,68888889	5,49169166
Rearing	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	3,65555556	3,22616617
Rearing	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	2,54385965	2,01258548
Rearing	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	4,63777778	3,08991875
Rearing	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	4,88958333	2,67824483
Rearing	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	4,575	2,77208761
Rearing	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	4,06140351	2,54973403
Rearing	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	3,40888889	3,12949275
Rearing	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	5,17291667	3,39516473
Rearing	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	4,18888889	2,66845899
Rearing	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	1,38947368	1,41176943
Rearing	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	14	7	7	2,8	2,56411795
Rearing	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	15	9	6	2,90888889	2,24776668
Rearing	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	2,96944444	2,3765461
Rearing	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	1,36666667	1,36522055
Rearing	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	1,8	1,76841782
Rearing	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	2,88958333	2,64086739
Rearing	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	2,31944444	2,09344616
Rearing	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	1,5245614	1,67788234
Rearing	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	1,48	1,21510337
Rearing	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	30	15	15	7,09111111	6,26281328
Rearing	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	30	15	15	3,93444444	4,59728792
Rearing	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	31	15	16	4,4172043	4,33061343
Rearing	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	29	14	15	5,02183908	4,89392461
Rearing	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	31	15	16	3,68602151	3,16811399
Rearing	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	30	15	15	5,09888889	4,35714486
Rearing	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	18	11	7	2,16481481	1,85456414
Rearing	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	17	11	6	2,41176471	2,44699195
Rearing	social enrichment	1	KO	Neo+ Arc	NA	NA	enriched	13	6	7	2,26153846	2,11287263
Rearing	social enrichment	1	KO	Neo+ Arc	NA	NA	non-social	31	20	11	1,94623656	1,6950839
Rearing	social enrichment	1	WT	Neo+ Arc	NA	NA	enriched	7	5	2	2,6952381	2,26743684
Rearing	social enrichment	1	WT	Neo+ Arc	NA	NA	social	47	31	16	2,83049645	3,42907313
Rearing	social enrichment	2	+/-	Neo+ Arc	NA	NA	enriched	16	9	7	2,38958333	1,74736707
Rearing	social enrichment	2	+/-	Neo+ Arc	NA	NA	social	7	2	5	3,38571429	1,95380513
Rearing	social enrichment	2	KO	Neo+ Arc	NA	NA	enriched	12	5	7	2,51111111	3,04734802
Rearing	social enrichment	2	KO	Neo+ Arc	NA	NA	non-social	23	12	11	2,42173913	2,25692221
Rearing	social enrichment	2	WT	Neo+ Arc	NA	NA	enriched	7	5	2	2,23809524	1,23219596
Rearing	social enrichment	2	WT	Neo+ Arc	NA	NA	social	43	26	17	2,70077519	2,93196657
Rearing	social enrichment	3	+/-	Neo+ Arc	NA	NA	enriched	17	10	7	2,41568627	2,02831066
Rearing	social enrichment	3	+/-	Neo+ Arc	NA	NA	social	11	6	5	3,56666667	3,82973744
Rearing	social enrichment	3	KO	Neo+ Arc	NA	NA	enriched	12	5	7	2,425	1,62934733
Rearing	social enrichment	3	KO	Neo+ Arc	NA	NA	non-social	24	12	12	2,27638889	2,3385548
Rearing	social enrichment	3	WT	Neo+ Arc	NA	NA	enriched	7	5	2	4,5952381	2,94224836
Rearing	social enrichment	3	WT	Neo+ Arc	NA	NA	social	38	24	14	2,61842105	2,34414096
SAP	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	9,80416667	5,78145022
SAP	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	9,71388889	4,31189237
SAP	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	7,85964912	3,38915443
SAP	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	6,86	3,07328995
SAP	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	8,59583333	2,93201675
SAP	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	8,52222222	3,05638373
SAP	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	12,5947368	7,59249356
SAP	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	12,01555556	8,83980775
SAP	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	8,34791667	3,77816277
SAP	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	7,79722222	2,77424877
SAP	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	14,0210526	8,71861362
SAP	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	11,7577778	8,33734634
SAP	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	9,51666667	4,95571499
SAP	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	11,56666667	3,58399923
SAP	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	11,0070175	5,89910622
SAP	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	10,9888889	5,64063582
SAP	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	8,12708333	3,71984107
SAP	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	9,88055556	3,3484644
SAP	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	12,422807	8,72075043
SAP	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	8,91555556	5,15157345
SAP	genotype differences	1	+/-	Neo+ Arc	+/-	NA	NA	32	16	16	10,846875	4,32393405
SAP	genotype differences	1	+/-	Neo+ Arc	-/-	NA	NA	28	16	12	12,3821429	4,41653722
SAP	genotype differences	1	KO	Neo+ Arc	NA	NA	KO control	13	6	7	18,2923077	6,71685489
SAP	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	31	15	16	10,1709677	5,47815015
SAP	genotype differences	1	WT	Neo+ Arc	NA	NA	WT control	19	8	11	14,2684211	4,69523627
SAP	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	30	15	15	9,37	5,27608898
SAP	genotype differences	2	+/-	Neo+ Arc	+/-	NA	NA	32	16	16	12,5	4,9714093
SAP	genotype differences	2	+/-	Neo+ Arc	-/-	NA	NA	27	15	12	12,1493827	4,19738798
SAP	genotype differences	2	KO	Neo+ Arc	NA	NA	KO control	12	6	6	17,0388889	4,3578058
SAP	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	31	15	16	12,3376344	5,38523181
SAP	genotype differences	2	WT	Neo+ Arc	NA	NA	WT control	18	8	10	15,1425926	5,1524955
SAP	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	30	15	15	10,9611111	4,16999025
SAP	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	31	15	16	15,9376344	5,18661912
SAP	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	30	15	15	10,1788889	4,9185043
SAP	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	18	11	7	4,43518519	3,06494991
SAP	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	17	11	6	2,89607843	1,63842244
SAP	social enrichment	1	KO	Neo+ Arc	NA	NA	enriched	13	6	7	6,08205128	2,44455614
SAP	social enrichment	1	KO	Neo+ Arc	NA	NA	non-social	34	22	12	4,10294118	2,21495328
SAP	social enrichment	1	WT	Neo+ Arc	NA	NA	enriched	7	5	2	8,3	4,07644544
SAP	social enrichment	1	WT	Neo+ Arc	NA	NA	social	48	31	17	4,09722222	3,48784335
SAP	social enrichment	2	+/-	Neo+ Arc	NA	NA	enriched	16	9	7	4,22708333	1,83049148
SAP	social enrichment	2	+/-	Neo+ Arc	NA	NA	social	8	3	5	4,475	1,25391451

SAP	social enrichment	2	KO	Neo+ Arc	NA	NA	enriched	12	5	7	6,45277778	2,76622699
SAP	social enrichment	2	KO	Neo+ Arc	NA	NA	non-social	24	12	12	5,44027778	2,56919655
SAP	social enrichment	2	WT	Neo+ Arc	NA	NA	enriched	7	5	2	7,10952381	1,90979098
SAP	social enrichment	2	WT	Neo+ Arc	NA	NA	social	43	26	17	4,31472868	2,11482925
SAP	social enrichment	3	+/-	Neo+ Arc	NA	NA	enriched	17	10	7	3,9745098	2,345342
SAP	social enrichment	3	+/-	Neo+ Arc	NA	NA	social	11	6	5	6,71212121	2,31896877
SAP	social enrichment	3	KO	Neo+ Arc	NA	NA	enriched	12	5	7	6,81388889	3,20083507
SAP	social enrichment	3	KO	Neo+ Arc	NA	NA	non-social	24	12	12	5,78472222	2,90611514
SAP	social enrichment	3	WT	Neo+ Arc	NA	NA	enriched	7	5	2	7,5	1,88345624
SAP	social enrichment	3	WT	Neo+ Arc	NA	NA	social	39	24	15	4,92307692	3,24920282
Social approach	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	70,9145833	25,5683078
Social approach	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	85,1694444	15,0840036
Social approach	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	93,2350877	21,6056333
Social approach	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	100,637778	22,4371003
Social approach	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	73,5375	23,4386982
Social approach	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	85,3194444	10,4237148
Social approach	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	91,1912281	26,0730215
Social approach	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	97,8355556	27,9380999
Social approach	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	77,3958333	17,5007211
Social approach	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	86,4305556	16,5952132
Social approach	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	95,1736842	33,2238007
Social approach	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	90,0111111	24,0084002
Social approach	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	85,9270833	20,5767154
Social approach	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	111,580556	33,7395714
Social approach	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	101,450877	40,0574254
Social approach	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	110,828889	28,2456567
Social approach	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	94,2479167	21,2840958
Social approach	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	108,805556	26,1735383
Social approach	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	102,984211	44,5198144
Social approach	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	84,6066667	28,7489439
Social approach	genotype differences	1	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	63,4072917	12,7492912
Social approach	genotype differences	1	+/-	Neo+ Arc	-/-	NA	NA	28	16	12	59,2642857	11,699284
Social approach	genotype differences	1	KO	Neo+ Arc	NA	NA	KO control	13	6	7	37,8769231	14,9482031
Social approach	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	31	15	16	60,0505376	24,1375455
Social approach	genotype differences	1	WT	Neo+ Arc	NA	NA	WT control	19	8	11	53,2964912	24,1228361
Social approach	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	30	15	15	52,9277778	17,7210096
Social approach	genotype differences	2	+/-	Neo+ Arc	+/+	NA	NA	32	16	16	98,9083333	20,7320195
Social approach	genotype differences	2	+/-	Neo+ Arc	-/-	NA	NA	27	15	12	97,6012346	12,3547475
Social approach	genotype differences	2	KO	Neo+ Arc	NA	NA	KO control	12	6	6	64,9833333	12,584434
Social approach	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	31	15	16	94,6462366	20,6541946
Social approach	genotype differences	2	WT	Neo+ Arc	NA	NA	WT control	18	8	10	78,9203704	18,9232061
Social approach	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	30	15	15	107,736667	19,2400292
Social approach	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	31	15	16	125,326882	40,8965311
Social approach	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	30	15	15	107,176667	21,4387806
Social approach	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	18	11	7	37,212963	9,26040936
Social approach	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	17	11	6	29,7529412	12,301677
Social approach	social enrichment	1	KO	Neo+ Arc	NA	NA	enriched	13	6	7	29,3230769	10,4554291
Social approach	social enrichment	1	KO	Neo+ Arc	NA	NA	non-social	34	22	12	16,9823529	4,67744236
Social approach	social enrichment	1	WT	Neo+ Arc	NA	NA	enriched	7	5	2	35,5	5,77042267
Social approach	social enrichment	1	WT	Neo+ Arc	NA	NA	social	48	31	17	28,0493056	10,6578509
Social approach	social enrichment	2	+/-	Neo+ Arc	NA	NA	enriched	16	9	7	63,3	14,5407473
Social approach	social enrichment	2	+/-	Neo+ Arc	NA	NA	social	8	3	5	64,0583333	21,7730046
Social approach	social enrichment	2	KO	Neo+ Arc	NA	NA	enriched	12	5	7	55,8	14,3210236
Social approach	social enrichment	2	KO	Neo+ Arc	NA	NA	non-social	24	12	12	56,2486111	15,4189543
Social approach	social enrichment	2	WT	Neo+ Arc	NA	NA	enriched	7	5	2	63,2142857	17,2406374
Social approach	social enrichment	2	WT	Neo+ Arc	NA	NA	social	43	26	17	61,2224806	16,7056429
Social approach	social enrichment	3	+/-	Neo+ Arc	NA	NA	enriched	17	10	7	56,5019608	20,2367943
Social approach	social enrichment	3	+/-	Neo+ Arc	NA	NA	social	11	6	5	51,8969697	12,1896172
Social approach	social enrichment	3	KO	Neo+ Arc	NA	NA	enriched	12	5	7	44,6333333	7,4936741
Social approach	social enrichment	3	KO	Neo+ Arc	NA	NA	non-social	24	12	12	49,2416667	10,1473266
Social approach	social enrichment	3	WT	Neo+ Arc	NA	NA	enriched	7	5	2	56,1380952	21,6496466
Social approach	social enrichment	3	WT	Neo+ Arc	NA	NA	social	39	24	15	57,4589744	13,9358628
Social escape	OT treatment	1	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	49,4979167	18,2522996
Social escape	OT treatment	1	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	58,5222222	13,2813862
Social escape	OT treatment	1	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	67,7982456	19,162249
Social escape	OT treatment	1	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	71,4844444	16,7331003
Social escape	OT treatment	7	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	50,9895833	17,3568333
Social escape	OT treatment	7	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	61,6194444	8,39596414
Social escape	OT treatment	7	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	52,1631579	22,1148961
Social escape	OT treatment	7	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	58,9866667	23,9791172
Social escape	OT treatment	14	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	54,2479167	13,5306181
Social escape	OT treatment	14	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	61,65	8,84163132
Social escape	OT treatment	14	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	51,3982456	27,040056
Social escape	OT treatment	14	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	56,4422222	25,0146607
Social escape	OT treatment	21	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	58,1104167	17,2415077
Social escape	OT treatment	21	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	75,7972222	18,5230812
Social escape	OT treatment	21	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	56,1578947	25,8179066
Social escape	OT treatment	21	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	64,2577778	24,1369455
Social escape	OT treatment	28	KO	Neo+ Arc	KO	OT20	KO control	16	10	6	65,7791667	19,236173
Social escape	OT treatment	28	KO	Neo+ Arc	KO	SAL	KO control	12	8	4	76,6111111	21,8178841
Social escape	OT treatment	28	WT	Neo+ Arc	WT	OT20	WT control	19	8	11	62,222807	33,6558913
Social escape	OT treatment	28	WT	Neo+ Arc	WT	SAL	WT control	15	7	8	52,0066667	20,2596722
Social escape	genotype differences	1	KO	Neo- Arc	NA	NA	KO control	31	15	16	37,3032258	15,4882497
Social escape	genotype differences	1	WT	Neo- Arc	NA	NA	WT control	30	15	15	37,4366667	16,2861936
Social escape	genotype differences	2	KO	Neo- Arc	NA	NA	KO control	31	15	16	58,0849462	16,7177214
Social escape	genotype differences	2	WT	Neo- Arc	NA	NA	WT control	30	15	15	66,5255556	16,126627
Social escape	genotype differences	3	KO	Neo- Arc	NA	NA	KO control	31	15	16	64,688172	21,168685
Social escape	genotype differences	3	WT	Neo- Arc	NA	NA	WT control	30	15	15	73,2855556	16,0828332
Social escape	social enrichment	1	+/-	Neo+ Arc	NA	NA	enriched	18	11	7	27,7833333	7,61545771
Social escape	social enrichment	1	+/-	Neo+ Arc	NA	NA	social	17	11	6	25,3137255	10,1245443

Social escape	social enrichment	1 KO	Neo+Arc	NA	NA	enriched	13	6	7	24,3128205	7,22583506
Social escape	social enrichment	1 KO	Neo+Arc	NA	NA	non-social	34	22	12	12,8696078	3,82446816
Social escape	social enrichment	1 WT	Neo+Arc	NA	NA	enriched	7	5	2	27,5666667	7,02245077
Social escape	social enrichment	1 WT	Neo+Arc	NA	NA	social	48	31	17	22,8118056	9,72036805
Social escape	social enrichment	2 +/-	Neo+Arc	NA	NA	enriched	16	9	7	48,5395833	11,0639703
Social escape	social enrichment	2 +/-	Neo+Arc	NA	NA	social	8	3	5	48,325	12,5201393
Social escape	social enrichment	2 KO	Neo+Arc	NA	NA	enriched	12	5	7	39,1527778	8,92107321
Social escape	social enrichment	2 KO	Neo+Arc	NA	NA	non-social	24	12	12	40,4319444	11,8670676
Social escape	social enrichment	2 WT	Neo+Arc	NA	NA	enriched	7	5	2	45,9428571	11,0423715
Social escape	social enrichment	2 WT	Neo+Arc	NA	NA	social	43	26	17	44,0581395	10,0716904
Social escape	social enrichment	3 +/-	Neo+Arc	NA	NA	enriched	17	10	7	43,372549	12,926476
Social escape	social enrichment	3 +/-	Neo+Arc	NA	NA	social	11	6	5	39,7878788	7,65926125
Social escape	social enrichment	3 KO	Neo+Arc	NA	NA	enriched	12	5	7	30,8194444	7,98715457
Social escape	social enrichment	3 KO	Neo+Arc	NA	NA	non-social	24	12	12	34,5541667	7,43996138
Social escape	social enrichment	3 WT	Neo+Arc	NA	NA	enriched	7	5	2	38,7904762	10,7552178
Social escape	social enrichment	3 WT	Neo+Arc	NA	NA	social	39	24	15	42,5641026	10,5793144
Stop isolated	OT treatment	1 KO	Neo+Arc	KO	OT20	KO control	16	10	6	286,05625	77,8183104
Stop isolated	OT treatment	1 KO	Neo+Arc	KO	SAL	KO control	12	8	4	298,819444	42,3693821
Stop isolated	OT treatment	1 WT	Neo+Arc	WT	OT20	WT control	19	8	11	224,959649	61,1855028
Stop isolated	OT treatment	1 WT	Neo+Arc	WT	SAL	WT control	15	7	8	217,026667	50,986259
Stop isolated	OT treatment	7 KO	Neo+Arc	KO	OT20	KO control	16	10	6	302,564583	51,8198596
Stop isolated	OT treatment	7 KO	Neo+Arc	KO	SAL	KO control	12	8	4	280,436111	27,3458931
Stop isolated	OT treatment	7 WT	Neo+Arc	WT	OT20	WT control	19	8	11	294,964912	74,4904721
Stop isolated	OT treatment	7 WT	Neo+Arc	WT	SAL	WT control	15	7	8	264,437778	74,2618574
Stop isolated	OT treatment	14 KO	Neo+Arc	KO	OT20	KO control	16	10	6	298,558333	54,0342121
Stop isolated	OT treatment	14 KO	Neo+Arc	KO	SAL	KO control	12	8	4	288,922222	39,055998
Stop isolated	OT treatment	14 WT	Neo+Arc	WT	OT20	WT control	19	8	11	269,924561	105,88563
Stop isolated	OT treatment	14 WT	Neo+Arc	WT	SAL	WT control	15	7	8	279,117778	85,3930314
Stop isolated	OT treatment	21 KO	Neo+Arc	KO	OT20	KO control	16	10	6	295,789583	58,5811191
Stop isolated	OT treatment	21 KO	Neo+Arc	KO	SAL	KO control	12	8	4	236,602778	57,671239
Stop isolated	OT treatment	21 WT	Neo+Arc	WT	OT20	WT control	15	8	7	274,826667	97,6900364
Stop isolated	OT treatment	21 WT	Neo+Arc	WT	SAL	WT control	15	7	8	263,217778	73,3562852
Stop isolated	OT treatment	28 KO	Neo+Arc	KO	OT20	KO control	16	10	6	254,229167	68,3965192
Stop isolated	OT treatment	28 KO	Neo+Arc	KO	SAL	KO control	12	8	4	257,077778	57,9811644
Stop isolated	OT treatment	28 WT	Neo+Arc	WT	OT20	WT control	18	7	11	263,537037	110,903305
Stop isolated	OT treatment	28 WT	Neo+Arc	WT	SAL	WT control	14	7	7	218,033333	117,860805
Stop isolated	genotype differences	1 +/-	Neo+Arc	+/+	NA	NA	32	16	16	279,959375	41,773964
Stop isolated	genotype differences	1 +/-	Neo+Arc	-/-	NA	NA	28	16	12	289,519048	39,7208639
Stop isolated	genotype differences	1 KO	Neo+Arc	NA	NA	KO control	13	6	7	354,207692	35,3554599
Stop isolated	genotype differences	1 KO	Neo-Arc	NA	NA	KO control	31	15	16	318,587097	47,1566402
Stop isolated	genotype differences	1 WT	Neo+Arc	NA	NA	WT control	19	8	11	294,989474	56,2775343
Stop isolated	genotype differences	1 WT	Neo-Arc	NA	NA	WT control	30	15	15	296,844444	52,1096981
Stop isolated	genotype differences	2 +/-	Neo+Arc	+/+	NA	NA	32	16	16	262,689583	47,0205076
Stop isolated	genotype differences	2 +/-	Neo+Arc	-/-	NA	NA	27	15	12	241,903704	37,2604008
Stop isolated	genotype differences	2 KO	Neo+Arc	NA	NA	KO control	12	6	6	336,738889	38,7256521
Stop isolated	genotype differences	2 KO	Neo-Arc	NA	NA	KO control	31	15	16	298,576344	49,3255739
Stop isolated	genotype differences	2 WT	Neo+Arc	NA	NA	WT control	18	8	10	270,112963	49,5311866
Stop isolated	genotype differences	2 WT	Neo-Arc	NA	NA	WT control	30	15	15	246,372222	39,4814677
Stop isolated	genotype differences	3 KO	Neo-Arc	NA	NA	KO control	31	15	16	267,658065	59,6056031
Stop isolated	genotype differences	3 WT	Neo-Arc	NA	NA	WT control	30	15	15	247,381111	49,0802843
Stop isolated	social enrichment	1 +/-	Neo+Arc	NA	NA	enriched	18	11	7	115,524074	18,1377871
Stop isolated	social enrichment	1 +/-	Neo+Arc	NA	NA	social	17	11	6	125,639216	20,4151334
Stop isolated	social enrichment	1 KO	Neo+Arc	NA	NA	enriched	13	6	7	140,407692	19,8837043
Stop isolated	social enrichment	1 KO	Neo+Arc	NA	NA	non-social	34	22	12	153,194118	18,683233
Stop isolated	social enrichment	1 WT	Neo+Arc	NA	NA	enriched	7	5	2	120,871429	12,2339907
Stop isolated	social enrichment	1 WT	Neo+Arc	NA	NA	social	48	31	17	112,810417	28,986906
Stop isolated	social enrichment	2 +/-	Neo+Arc	NA	NA	enriched	16	9	7	82,3791667	23,2573903
Stop isolated	social enrichment	2 +/-	Neo+Arc	NA	NA	social	8	3	5	92,6541667	34,2777078
Stop isolated	social enrichment	2 KO	Neo+Arc	NA	NA	enriched	12	5	7	113,438889	25,1063791
Stop isolated	social enrichment	2 KO	Neo+Arc	NA	NA	non-social	24	12	12	107,933333	27,2302297
Stop isolated	social enrichment	2 WT	Neo+Arc	NA	NA	enriched	7	5	2	90,0666667	30,923891
Stop isolated	social enrichment	2 WT	Neo+Arc	NA	NA	social	43	26	17	82,4139535	24,6369386
Stop isolated	social enrichment	3 +/-	Neo+Arc	NA	NA	enriched	17	10	7	93,4392157	29,537338
Stop isolated	social enrichment	3 +/-	Neo+Arc	NA	NA	social	11	6	5	104,721212	28,1957888
Stop isolated	social enrichment	3 KO	Neo+Arc	NA	NA	enriched	12	5	7	123,461111	17,1948303
Stop isolated	social enrichment	3 KO	Neo+Arc	NA	NA	non-social	24	12	12	119,709722	23,943354
Stop isolated	social enrichment	3 WT	Neo+Arc	NA	NA	enriched	7	5	2	101,157143	28,1782009
Stop isolated	social enrichment	3 WT	Neo+Arc	NA	NA	social	39	24	15	87,8666667	28,1370674

experiment	day	event	genotype	KO_postweaning	treatment	y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
genotype differences	3	Cuddling	NA	NA	NA	CumTime	Neo- Arc KO	WT	31	30	-3,36861728	0,00075546	0,00075546	***
genotype differences	1	FollowZone	NA	NA	NA	CumTime	+/-;M:KO	WT	28	40	-4,54930101	5,38E-06	3,77E-05	****
genotype differences	1	FollowZone	NA	NA	NA	CumTime	+/-;M:WT	WT	32	40	-5,11454288	3,15E-07	2,52E-06	****
genotype differences	1	FollowZone	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	13	13	2,4732533	0,01338892	0,04016676	*
genotype differences	1	FollowZone	NA	NA	NA	CumTime	Neo- Arc KO	WT	13	40	2,82680261	0,00470153	0,01880612	*
genotype differences	2	FollowZone	NA	NA	NA	CumTime	+/-;M:KO	WT	27	42	-5,54094468	3,01E-08	2,41E-07	****
genotype differences	2	FollowZone	NA	NA	NA	CumTime	+/-;M:WT	WT	32	42	-4,06730064	4,76E-05	0,00033293	***
genotype differences	2	FollowZone	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	20	12	3,22692273	0,00125129	0,00750775	**
genotype differences	2	FollowZone	NA	NA	NA	CumTime	Neo- Arc KO	WT	20	42	3,08918952	0,00200703	0,01003517	*
genotype differences	3	FollowZone	NA	NA	NA	CumTime	Neo- Arc KO	WT	20	24	2,33435734	0,01957702	0,01957702	*
genotype differences	2	Make contact	NA	NA	NA	CumTime	Neo- Arc KO	WT	31	30	2,87811198	0,00400063	0,00400063	**
genotype differences	1	Move in contact	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	31	13	-3,0075364	0,00263375	0,01476094	**
genotype differences	2	Move in contact	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	31	12	-3,2922358	0,00099394	0,0069576	**
genotype differences	1	Nose contact	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	31	13	-3,9793848	6,9094E-05	0,00055275	***
genotype differences	2	Nose contact	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	31	12	-3,33236504	0,00086111	0,00602779	**
genotype differences	1	SAP	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	31	13	3,80682117	0,00014076	0,00140764	**
genotype differences	1	Social approach	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	31	13	-3,01852964	0,00254005	0,02032036	*
genotype differences	2	Social approach	NA	NA	NA	CumTime	Neo- Arc KO	Neo+ Arc KO	31	12	-3,99891085	6,3635E-05	0,00044544	****
genotype differences	1	Move in contact	NA	NA	NA	CumTime	+/-;M:KO	WT	28	49	-2,73490228	0,00623988	0,02495952	*
genotype differences	1	Move in contact	NA	NA	NA	CumTime	+/-;M:WT	WT	32	49	-3,16114171	0,00157152	0,01100064	*
genotype differences	1	Move in contact	NA	NA	NA	CumTime	Neo+ Arc KO	WT	13	49	3,32848759	0,00087319	0,00698551	**
genotype differences	2	Move in contact	NA	NA	NA	CumTime	Neo+ Arc KO	WT	12	48	3,93878405	8,19E-05	0,00073706	***
genotype differences	1	Nose contact	NA	NA	NA	CumTime	Neo+ Arc KO	WT	13	49	2,95605662	0,003116	0,02181199	*
genotype differences	2	Nose contact	NA	NA	NA	CumTime	Neo+ Arc KO	WT	12	48	4,08736135	4,36E-05	0,00034905	***
genotype differences	1	SAP	NA	NA	NA	CumTime	Neo+ Arc KO	WT	13	49	-3,33078669	0,00086601	0,00779408	**
genotype differences	3	SAP	NA	NA	NA	CumTime	Neo- Arc KO	WT	31	30	-4,09005676	4,31E-05	4,31E-05	****
genotype differences	2	Social approach	NA	NA	NA	CumTime	Neo+ Arc KO	WT	12	48	4,48034829	7,45E-06	7,45E-05	****
genotype differences	1	Stop isolated	NA	NA	NA	CumTime	Neo+ Arc KO	WT	13	49	-3,70058819	0,0002151	0,0017208	**
genotype differences	2	Stop isolated	NA	NA	NA	CumTime	Neo- Arc KO	WT	31	48	-3,51908892	0,00043303	0,00259819	**
genotype differences	2	Stop isolated	NA	NA	NA	CumTime	Neo+ Arc KO	WT	12	48	-4,47661794	7,58E-06	6,83E-05	****
genotype differences	1	Cuddling	WT	NA	NA	CumTime	F	M	15	15	-4,12890526	3,64E-05	3,64E-05	****
genotype differences	2	Cuddling	Neo- Arc KO	NA	NA	CumTime	F	M	15	16	-3,12274919	0,0017917	0,0017917	**
genotype differences	1	Move in contact	Neo- Arc KO	NA	NA	CumTime	F	M	15	16	-1,97642354	0,04810683	0,04810683	*
genotype differences	2	Move in contact	+/-;M:KO	NA	NA	CumTime	F	M	15	12	2,29406554	0,02178673	0,02178673	*
genotype differences	3	Move in contact	Neo- Arc KO	NA	NA	CumTime	F	M	15	16	2,76699295	0,0056576	0,0056576	**
genotype differences	3	Move in contact	WT	NA	NA	CumTime	F	M	15	15	2,42646697	0,01524664	0,01524664	*
genotype differences	1	Nose contact	+/-;M:KO	NA	NA	CumTime	F	M	16	12	-2,5533109	0,01067042	0,01067042	*
genotype differences	1	Nose contact	WT	NA	NA	CumTime	F	M	28	26	-2,45833016	0,01395848	0,01395848	*
genotype differences	2	Nose contact	+/-;M:WT	NA	NA	CumTime	F	M	16	16	2,18595725	0,02881873	0,02881873	*
genotype differences	1	Social approach	WT	NA	NA	CumTime	F	M	28	26	-2,40639361	0,0161109	0,0161109	*
genotype differences	2	Social approach	+/-;M:KO	NA	NA	CumTime	F	M	15	12	2,14698016	0,03179486	0,03179486	*
genotype differences	2	Social approach	+/-;M:WT	NA	NA	CumTime	F	M	16	16	3,16586912	0,0015462	0,0015462	**
genotype differences	3	Social approach	Neo- Arc KO	NA	NA	CumTime	F	M	15	16	2,2926513	0,02186809	0,02186809	*
genotype differences	1	Social escape	WT	NA	NA	CumTime	F	M	15	15	-2,30203276	0,02133332	0,02133332	*
genotype differences	3	Social escape	Neo- Arc KO	NA	NA	CumTime	F	M	15	16	3,04369225	0,00233694	0,00233694	**
genotype differences	2	Stop isolated	+/-;M:WT	NA	NA	CumTime	F	M	16	16	-2,52515751	0,01156464	0,01156464	*
genotype differences	3	Stop isolated	Neo- Arc KO	NA	NA	CumTime	F	M	15	16	-2,68793601	0,00718952	0,00718952	**
social enrichment	3	FollowZone	NA	control	NA	CumTime	KO	WT	17	33	3,26171818	0,00110739	0,00332218	**
social enrichment	1	Make contact	NA	control	NA	CumTime	KO	WT	34	48	3,76811159	0,00016449	0,00049346	***
social enrichment	1	Move in contact	NA	control	NA	CumTime	KO	WT	34	48	4,04144368	5,31E-05	0,00015937	***
social enrichment	3	Move in contact	NA	control	NA	CumTime	KO	WT	24	39	2,90855967	0,00363098	0,01089294	*
social enrichment	1	Nose contact	NA	control	NA	CumTime	KO	WT	34	48	4,49312691	7,02E-06	2,11E-05	****
social enrichment	1	Social approach	NA	control	NA	CumTime	KO	WT	34	48	5,15757326	2,50E-07	7,51E-07	****
social enrichment	1	Social escape	NA	control	NA	CumTime	KO	WT	34	48	5,19733237	2,02E-07	6,07E-07	****
social enrichment	3	Social escape	NA	control	NA	CumTime	KO	WT	24	39	3,33398204	0,00085612	0,00256837	**
social enrichment	1	Stop isolated	NA	control	NA	CumTime	KO	WT	34	48	-6,00817392	1,88E-09	5,63E-09	****
social enrichment	2	Stop isolated	NA	control	NA	CumTime	KO	WT	24	43	-3,43575084	0,00059091	0,00177274	**
social enrichment	3	Stop isolated	NA	control	NA	CumTime	KO	WT	24	39	-4,3487327	1,37E-05	4,11E-05	****
social enrichment	1	Cuddling	KO	NA	NA	CumTime	control	enriched	32	13	4,11200046	3,92E-05	3,92E-05	****
social enrichment	3	FollowZone	KO	NA	NA	CumTime	control	enriched	17	12	2,85786832	0,00426497	0,00426497	**
social enrichment	1	Move in contact	KO	NA	NA	CumTime	control	enriched	34	13	4,16363601	3,13E-05	3,13E-05	****
social enrichment	1	Nose contact	KO	NA	NA	CumTime	control	enriched	34	13	3,37820002	0,00072962	0,00072962	**
social enrichment	1	Nose contact	WT	NA	NA	CumTime	control	enriched	48	7	2,23544642	0,02538806	0,02538806	*
social enrichment	2	SAP	WT	NA	NA	CumTime	control	enriched	43	7	2,9779955	0,0029014	0,0029014	**
social enrichment	3	SAP	WT	NA	NA	CumTime	control	enriched	39	7	2,78352756	0,00537713	0,00537713	**
social enrichment	1	Social approach	KO	NA	NA	CumTime	control	enriched	34	13	3,7849322	0,00072884	0,00072884	***
social enrichment	1	Social escape	KO	NA	NA	CumTime	control	enriched	34	13	4,42496623	9,65E-06	9,65E-06	****
OT treatment	1	Cuddling	NA	NA	SAL	CumTime	KO	WT	12	15	3,02529023	0,00248395	0,00248395	**
OT treatment	1	Move in contact	NA	NA	OT20	CumTime	KO	WT	16	19	2,98040652	0,00287866	0,00287866	**
OT treatment	1	Move in contact	NA	NA	SAL	CumTime	KO	WT	12	15	4,09878031	4,15E-05	4,15E-05	****
OT treatment	1	Nose contact	NA	NA	OT20	CumTime	KO	WT	16	19	2,91417527	0,0035663	0,0035663	**
OT treatment	1	Nose contact	NA	NA	SAL	CumTime	KO	WT	12	15	3,31806025	0,00090645	0,00090645	***
OT treatment	1	Social approach	NA	NA	OT20	CumTime	KO	WT	16	19	2,78151795	0,00541053	0,00541053	**
OT treatment	1	Social escape	NA	NA	OT20	CumTime	KO	WT	16	19	2,81463126	0,00488332	0,00488332	**
OT treatment	1	Stop isolated	NA	NA	SAL	CumTime	KO	WT	12	15	-3,51324026	0,00044268	0,00044268	***
OT treatment	7	Nose contact	NA	NA	OT20	CumTime	KO	WT	16	19	2,84774457	0,00440302	0,00440302	**
OT treatment	7	Nose contact	NA	NA	SAL	CumTime	KO	WT	12	15	3,02575207	0,00248016	0,00248016	**
OT treatment	14	Nose contact	NA	NA	OT20	CumTime	KO	WT	16	19	3,16254248	0,00156398	0,00156398	**
OT treatment	14	Rearing	NA	NA	OT20	CumTime	KO	WT	16	19	-3,52780284	0,00041902	0,00041902	***
OT treatment	21	Nose contact	NA	NA	OT20	CumTime	KO	WT	16	19	3,26188936	0,00110672	0,00110672	**
OT treatment	21	Periphery Zone	NA	NA	OT20	CumTime	KO	WT	16	19	4,23850354	2,25E-05	2,25E-05	****
OT treatment	28	Periphery Zone	NA	NA	OT20	CumTime	KO	WT	16	19	2,91397119	0,00356863	0,00356863	**
OT treatment	1	Rearing	WT	NA	NA	CumTime	OT20	SAL	19	15	2,01184883	0,04423587	0,04423587	*
OT treatment	1	Social approach	KO	NA	NA	CumTime	OT20	SAL	16	12	2,08907255	0,03670119	0,03670119	*
OT treatment	7	Social escape	KO	NA	NA	CumTime	OT20	SAL						

Table S3. Mean and statistics of behavioral tests in pups

var_s3	pup_genotype	N	mean	sd
duration_vocalization	+/-	85	49,7351866	11,0361411
duration_vocalization	KO	63	40,9978991	6,75324454
duration_vocalization	WT	70	45,6495472	9,56964462
latency_nest	+/-	85	53,6951429	83,8325753
latency_nest	KO	63	67,6980526	80,5066531
latency_nest	WT	70	24,8395	56,7165856
latency_vocalize	+/-	85	1,69394118	3,51701427
latency_vocalize	KO	63	4,30123529	5,58921977
latency_vocalize	WT	70	1,32723913	1,56354929
maxamp_mean	+/-	85	-65,637918	5,11542161
maxamp_mean	KO	63	-66,758889	4,05861211
maxamp_mean	WT	70	-68,857203	4,67345564
maxfreq_mean	+/-	85	65,125605	3,98962759
maxfreq_mean	KO	63	65,8766498	3,30332117
maxfreq_mean	WT	70	68,6352679	3,68774047
meanDuration_nestEntries	+/-	85	15,1329429	28,4441598
meanDuration_nestEntries	KO	63	12,1270526	17,5934688
meanDuration_nestEntries	WT	70	26,9240714	29,0272326
meanfreq_mean	+/-	85	65,8608447	4,34175017
meanfreq_mean	KO	63	66,4667687	4,34813015
meanfreq_mean	WT	70	69,3788383	4,49763199
number_immobile	+/-	85	2,28571429	2,82396705
number_immobile	KO	63	0,84210526	1,21395396
number_immobile	WT	70	1,35714286	1,80973265
number_nestEntries	+/-	85	3,65714286	3,92535392
number_nestEntries	KO	63	3,10526316	3,3647641
number_nestEntries	WT	70	6,64285714	3,50887009
number_vocalizations	+/-	85	466,823529	247,774907
number_vocalizations	KO	63	272,058824	180,636538
number_vocalizations	WT	70	488,391304	187,979143
totalTime_immobile	+/-	85	36,6044857	48,8136556
totalTime_immobile	KO	63	11,3711579	20,680017
totalTime_immobile	WT	70	21,9346071	40,0280612
totalTime_nestEntries	+/-	85	64,2721429	86,3622889
totalTime_nestEntries	KO	63	60,7066842	87,8881921
totalTime_nestEntries	WT	70	162,275429	104,320138
totalTime_vocalizing	+/-	85	23930,6176	12516,2986
totalTime_vocalizing	KO	63	11669,8529	8965,10645
totalTime_vocalizing	WT	70	22876,3261	10440,8787

var_s3	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
duration_vocalization	value_s3	+/-	KO	17	17	-2,6864149	0,00722233	0,021667	*
latency_nest	value_s3	+/-	WT	35	28	-2,2677402	0,02334504	0,04669009	*
latency_nest	value_s3	KO	WT	19	28	-3,3828836	0,00071729	0,00215187	**
latency_vocalize	value_s3	+/-	KO	17	17	2,77940619	0,00544584	0,01633751	*
maxfreq_mean	value_s3	+/-	WT	17	23	2,416453	0,01567255	0,04701765	*
maxfreq_mean	value_s3	KO	WT	17	23	2,416453	0,01567255	0,04701765	*
meanDuration_nestEntries	value_s3	+/-	WT	35	28	3,26575864	0,00109171	0,00327514	**
meanDuration_nestEntries	value_s3	KO	WT	19	28	2,70358978	0,00685949	0,01371898	*
meanfreq_mean	value_s3	+/-	WT	17	23	2,41597125	0,0156933	0,0470799	*
number_nestEntries	value_s3	+/-	WT	35	28	3,34618762	0,00081931	0,00245793	**
number_nestEntries	value_s3	KO	WT	19	28	3,14020599	0,00168829	0,00337658	**
number_vocalizations	value_s3	+/-	KO	17	17	-2,3713162	0,01772486	0,03544972	*
number_vocalizations	value_s3	KO	WT	17	23	3,07698074	0,00209109	0,00627326	**
totalTime_nestEntries	value_s3	+/-	WT	35	28	3,78581036	0,00015321	0,00045963	***
totalTime_nestEntries	value_s3	KO	WT	19	28	3,32887904	0,00087196	0,00174393	**
totalTime_vocalizing	value_s3	+/-	KO	17	17	-2,9550564	0,00312612	0,00937836	**
totalTime_vocalizing	value_s3	KO	WT	17	23	2,84761835	0,00440477	0,00937836	**

Table S4. Mean and statistics of western blot data in the PVN of naïve mice and HEK293 cells

var_s4	plasmid	condition	region	genotype	N	n_females	n_males	mean	sd
ERK	pUC19	DMEM	NA	NA	10	NA	NA	11677,1343	5920,8986
ERK	pUC19	SVF	NA	NA	10	NA	NA	8935,5725	4249,83131
ERK	pcDNA3.1	DMEM	NA	NA	10	NA	NA	7977,4904	4935,46868
ERK	pcDNA3.1	SVF	NA	NA	10	NA	NA	7107,1741	4324,5222
ERK_to_GAPDH	pUC19	DMEM	NA	NA	10	NA	NA	0,92864882	0,43109111
ERK_to_GAPDH	pUC19	SVF	NA	NA	10	NA	NA	0,75356517	0,26932804
ERK_to_GAPDH	pcDNA3.1	DMEM	NA	NA	10	NA	NA	0,70743437	0,44016379
ERK_to_GAPDH	pcDNA3.1	SVF	NA	NA	10	NA	NA	0,62443717	0,26269784
GAPDH	pUC19	DMEM	NA	NA	18	NA	NA	12485,8947	2208,07502
GAPDH	pUC19	SVF	NA	NA	18	NA	NA	11786,6873	2303,52084
GAPDH	pcDNA3.1	DMEM	NA	NA	18	NA	NA	11453,5202	2469,76845
GAPDH	pcDNA3.1	SVF	NA	NA	18	NA	NA	10533,2288	2514,73536
S6	pUC19	DMEM	NA	NA	10	NA	NA	9768,8152	3690,46949
S6	pUC19	SVF	NA	NA	10	NA	NA	12051,1651	4559,52957
S6	pcDNA3.1	DMEM	NA	NA	10	NA	NA	10039,9013	3849,10892
S6	pcDNA3.1	SVF	NA	NA	10	NA	NA	9834,1258	3001,55619
S6_to_GAPDH	pUC19	DMEM	NA	NA	10	NA	NA	0,76413399	0,24477183
S6_to_GAPDH	pUC19	SVF	NA	NA	10	NA	NA	0,99242539	0,39893185
S6_to_GAPDH	pcDNA3.1	DMEM	NA	NA	10	NA	NA	0,86804233	0,38376373
S6_to_GAPDH	pcDNA3.1	SVF	NA	NA	10	NA	NA	0,95057921	0,38441322
pERK_to_ERK	pUC19	DMEM	NA	NA	10	NA	NA	0,45537314	0,2905289
pERK_to_ERK	pUC19	SVF	NA	NA	10	NA	NA	0,59115968	0,4210605
pERK_to_ERK	pcDNA3.1	DMEM	NA	NA	10	NA	NA	1,00345316	0,70494097
pERK_to_ERK	pcDNA3.1	SVF	NA	NA	10	NA	NA	1,73747818	1,27849145
pS6_to_S6	pUC19	DMEM	NA	NA	10	NA	NA	1,04827167	0,82999265
pS6_to_S6	pUC19	SVF	NA	NA	10	NA	NA	1,81026144	1,12296576
pS6_to_S6	pcDNA3.1	DMEM	NA	NA	10	NA	NA	1,14422676	1,05226876
pS6_to_S6	pcDNA3.1	SVF	NA	NA	10	NA	NA	1,88235678	1,02702494
phospho_ERK	pUC19	DMEM	NA	NA	10	NA	NA	4873,6277	3295,0332
phospho_ERK	pUC19	SVF	NA	NA	10	NA	NA	4214,9116	1824,76088
phospho_ERK	pcDNA3.1	DMEM	NA	NA	10	NA	NA	7157,6541	6235,0469
phospho_ERK	pcDNA3.1	SVF	NA	NA	10	NA	NA	7688,0423	4031,93147
phospho_S6	pUC19	DMEM	NA	NA	10	NA	NA	8318,4889	3415,60374
phospho_S6	pUC19	SVF	NA	NA	10	NA	NA	17998,8278	2790,48605
phospho_S6	pcDNA3.1	DMEM	NA	NA	10	NA	NA	9039,2244	4746,66104
phospho_S6	pcDNA3.1	SVF	NA	NA	10	NA	NA	16034,7297	3086,84985
ERK	NA	NA	OB	Neo+ KO1	3	0	3	63,2130112	3,06494794
ERK	NA	NA	OB	Neo- KO1	3	0	3	59,3175418	3,39147775
ERK	NA	NA	OB	WT	3	0	3	53,4841826	36,1000162
ERK	NA	NA	PVN	Neo+ KO1	36	16	20	8472,82009	8625,51157
ERK	NA	NA	PVN	Neo- KO1	18	12	6	8535,29889	8781,25579
ERK	NA	NA	PVN	WT	78	30	40	8473,64791	9390,74186
ERK_to_GAPDH	NA	NA	PVN	Neo+ KO1	18	8	10	1,06192304	0,13155955
ERK_to_GAPDH	NA	NA	PVN	Neo- KO1	9	6	3	1,10033605	0,18462687
ERK_to_GAPDH	NA	NA	PVN	WT	36	15	20	1,23764766	0,23225308
GAPDH	NA	NA	OB	Neo+ KO1	3	0	3	17065,985	1625,64139
GAPDH	NA	NA	OB	Neo- KO1	3	0	3	16522,4833	1341,45814
GAPDH	NA	NA	OB	WT	3	0	3	10798,7987	1854,45529
GAPDH	NA	NA	PVN	Neo+ KO1	36	16	20	15945,0775	1475,14826
GAPDH	NA	NA	PVN	Neo- KO1	18	12	6	15680,9561	1959,6468
GAPDH	NA	NA	PVN	WT	78	30	40	14862,5168	2311,68727
pERK_to_ERK	NA	NA	OB	Neo+ KO1	3	0	3	91,9934207	39,2676313
pERK_to_ERK	NA	NA	OB	Neo- KO1	3	0	3	61,9008749	31,079162
pERK_to_ERK	NA	NA	OB	WT	3	0	3	78,8949267	62,8484406
pERK_to_ERK	NA	NA	PVN	Neo+ KO1	36	16	20	61,7232476	78,5546957
pERK_to_ERK	NA	NA	PVN	Neo- KO1	18	12	6	42,2116689	48,1636843
pERK_to_ERK	NA	NA	PVN	WT	78	30	40	58,0835682	69,1633694
phospho_ERK	NA	NA	OB	Neo+ KO1	3	0	3	57,7184843	23,0036762
phospho_ERK	NA	NA	OB	Neo- KO1	3	0	3	36,754669	18,7375192
phospho_ERK	NA	NA	OB	WT	3	0	3	27,2628956	6,87156211
phospho_ERK	NA	NA	PVN	Neo+ KO1	36	16	20	4913,60635	5634,88683
phospho_ERK	NA	NA	PVN	Neo- KO1	18	12	6	3759,39269	4255,29497
phospho_ERK	NA	NA	PVN	WT	78	30	40	3930,16758	4828,95502

condition	plasmid	brain_region	sex	var_s4_stat	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
DMEM	NA	NA	NA	pERK_to_ERK_normalized	value_s5_stat	pcDNA3.1	pUC19	5	5	-2,785430073	0,00534568	0,00534568	**
NA	pUC19	NA	NA	pS6_to_S6_normalized	value_s5_stat	DMEM	SVF	5	5	2,785430073	0,00534568	0,00534568	**
NA	pcDNA3.1	NA	NA	pS6_to_S6_normalized	value_s5_stat	DMEM	SVF	5	5	1,984485278	0,04720177	0,04720177	*
NA	pUC19	NA	NA	phospho_S6	value_s5_stat	DMEM	SVF	5	5	2,611164839	0,00902344	0,00902344	**
NA	pcDNA3.1	NA	NA	phospho_S6	value_s5_stat	DMEM	SVF	5	5	2,193378465	0,02828012	0,02828012	*
NA	NA	PVN	F	pERK_ERK_normalized	value_s5_stat	Neo- KO1	Neo+ KO1	6	8	2,201398	0,02770785	NA	*
NA	NA	PVN	F	pERK_ERK_normalized	value_s5_stat	Neo+ KO1	WT	8	11	-2,09342	0,03631168	NA	*
NA	NA	PVN	NA	pERK_ERK_normalized	value_s5_stat	F	M	8	13	-2,824407	0,00473683	0,00473683	**

Table S5. Mean and statistics of qPCR data in dams and naïve mice

var_s5	structure	condition	genotype	N	n_females	n_males	mean	sd
Avp	CPU	dams	Neo+Arc KO	6	6	0	-11,399553	0,92875372
Avp	CPU	dams	Neo-Arc KO	7	7	0	-9,0394481	1,20227005
Avp	CPU	dams	WT	9	9	0	-8,9034691	0,86082377
Avp	CPU	naive	Neo+Arc KO	14	8	6	-10,258764	1,36608629
Avp	CPU	naive	WT	13	8	5	-10,899407	1,43984174
Avp	NAC	dams	Neo+Arc KO	4	4	0	-9,7519224	0,68666996
Avp	NAC	dams	Neo-Arc KO	8	8	0	-9,4340321	0,90986339
Avp	NAC	dams	WT	10	10	0	-9,5109452	0,82115445
Avp	NAC	naive	Neo+Arc KO	13	7	6	-10,474201	0,8618336
Avp	NAC	naive	WT	13	8	5	-9,7247441	0,46025262
Avp	PFC	dams	Neo+Arc KO	5	5	0	-10,571044	1,5918167
Avp	PFC	dams	Neo-Arc KO	8	8	0	-8,5099134	0,4673804
Avp	PFC	dams	WT	9	9	0	-8,9958074	0,94226404
Avp	PFC	naive	Neo+Arc KO	13	7	6	-9,7000827	1,61147124
Avp	PFC	naive	WT	10	5	5	-10,302218	0,84905452
Avp	PVN	dams	Neo+Arc KO	6	6	0	-4,4726075	1,43903245
Avp	PVN	dams	Neo-Arc KO	6	6	0	-3,4030169	0,90463363
Avp	PVN	dams	WT	8	8	0	-5,1197579	2,20771139
Avp	PVN	naive	Neo+Arc KO	14	8	6	-4,2113028	1,8566728
Avp	PVN	naive	WT	13	8	5	-3,9387352	2,97789574
Avp	SON	dams	Neo+Arc KO	6	6	0	-2,5846835	2,20741916
Avp	SON	dams	Neo-Arc KO	8	8	0	-3,5192006	3,08660813
Avp	SON	dams	WT	8	8	0	-4,6814528	2,32726397
Avp	SON	naive	Neo+Arc KO	13	7	6	-4,4457196	2,60010185
Avp	SON	naive	WT	13	8	5	-5,2528746	4,04824411
Avpr1a	CPU	dams	Neo+Arc KO	5	5	0	-9,8660451	1,89471052
Avpr1a	CPU	dams	Neo-Arc KO	7	7	0	-11,829204	0,86305708
Avpr1a	CPU	dams	WT	8	8	0	-10,798241	1,52553108
Avpr1a	CPU	naive	Neo+Arc KO	14	8	6	-10,346802	1,82711381
Avpr1a	CPU	naive	WT	13	8	5	-11,110091	2,15309044
Avpr1a	NAC	dams	Neo+Arc KO	5	5	0	-8,4901416	0,79911512
Avpr1a	NAC	dams	Neo-Arc KO	7	7	0	-11,767914	1,32073721
Avpr1a	NAC	dams	WT	10	10	0	-10,23165	1,78533384
Avpr1a	NAC	naive	Neo+Arc KO	13	7	6	-10,723388	1,77394007
Avpr1a	NAC	naive	WT	13	8	5	-10,672737	2,23836224
Avpr1a	PFC	dams	Neo+Arc KO	5	5	0	-12,526886	0,24016134
Avpr1a	PFC	dams	Neo-Arc KO	8	8	0	-12,12388	0,5239606
Avpr1a	PFC	dams	WT	8	8	0	-12,58299	0,50004029
Avpr1a	PFC	naive	Neo+Arc KO	13	7	6	-8,2440993	2,95457489
Avpr1a	PFC	naive	WT	10	5	5	-9,4660235	2,19865775
Avpr1a	PVN	dams	Neo+Arc KO	6	6	0	-11,033641	0,78112633
Avpr1a	PVN	dams	Neo-Arc KO	7	7	0	-8,7762219	0,39215041
Avpr1a	PVN	dams	WT	8	8	0	-9,7865295	1,15946836
Avpr1a	PVN	naive	Neo+Arc KO	14	8	6	-3,9422718	2,93727426
Avpr1a	PVN	naive	WT	13	8	5	-5,740932	1,57805492
Avpr1a	SON	dams	Neo+Arc KO	6	6	0	-12,109911	0,3069019
Avpr1a	SON	dams	Neo-Arc KO	8	8	0	-10,080011	0,52352728
Avpr1a	SON	dams	WT	8	8	0	-10,587507	1,65802352
Avpr1a	SON	naive	Neo+Arc KO	13	7	6	-5,9299838	3,04359541
Avpr1a	SON	naive	WT	13	8	5	-6,5977339	3,57851112
Cartpt	NAC	dams	Neo+Arc KO	5	5	0	-3,9456513	0,50290061
Cartpt	NAC	dams	Neo-Arc KO	8	8	0	-4,1291712	0,23913007
Cartpt	NAC	dams	WT	10	10	0	-4,1259405	0,42376932
Cartpt	NAC	naive	Neo+Arc KO	13	7	6	-4,1873948	0,54766675
Cartpt	NAC	naive	WT	13	8	5	-3,9744621	0,57500383
Cartpt	PVN	dams	Neo+Arc KO	5	5	0	-5,3926199	0,7393825
Cartpt	PVN	dams	Neo-Arc KO	7	7	0	-4,4593211	0,94876736
Cartpt	PVN	dams	WT	8	8	0	-4,6880818	0,77309241
Cartpt	PVN	naive	Neo+Arc KO	14	8	6	-4,9350334	1,47848739
Cartpt	PVN	naive	WT	13	8	5	-4,9381295	0,72236277
Cartpt	SON	dams	Neo+Arc KO	6	6	0	-6,2958651	0,28049339
Cartpt	SON	dams	Neo-Arc KO	7	7	0	-6,5882363	0,32816614
Cartpt	SON	dams	WT	8	8	0	-6,2594571	0,24711411
Cartpt	SON	naive	Neo+Arc KO	13	7	6	-5,8874308	0,66532185
Cartpt	SON	naive	WT	13	8	5	-6,3789545	0,52893831
Cck	PFC	dams	Neo+Arc KO	6	6	0	-2,7250749	0,34316547
Cck	PFC	dams	Neo-Arc KO	7	7	0	-3,1125509	0,13657823
Cck	PFC	dams	WT	8	8	0	-2,9986384	0,32265755
Cck	PFC	naive	Neo+Arc KO	12	6	6	-1,7914484	1,38878805
Cck	PFC	naive	WT	10	5	5	-2,6448085	0,52151789
Cck	PVN	dams	Neo+Arc KO	5	5	0	-4,5985736	0,49134979
Cck	PVN	dams	Neo-Arc KO	7	7	0	-6,3547249	0,42762752
Cck	PVN	dams	WT	8	8	0	-6,0955667	0,92891153
Cck	PVN	naive	Neo+Arc KO	14	8	6	-4,8307286	1,39724416
Cck	PVN	naive	WT	13	8	5	-5,4972933	0,57526513
Cck	SON	dams	Neo+Arc KO	6	6	0	-4,3389436	0,44700009
Cck	SON	dams	Neo-Arc KO	8	8	0	-3,307162	0,4045821
Cck	SON	dams	WT	7	7	0	-4,073647	0,75394824
Cck	SON	naive	Neo+Arc KO	13	7	6	-4,5692355	1,45524029
Cck	SON	naive	WT	13	8	5	-4,7705164	1,21302555
Cntnap2	CPU	dams	Neo+Arc KO	6	6	0	-6,4504975	0,6165757
Cntnap2	CPU	dams	Neo-Arc KO	7	7	0	-6,5167529	0,32803721
Cntnap2	CPU	dams	WT	8	8	0	-6,4815994	0,48914543
Cntnap2	CPU	naive	Neo+Arc KO	14	8	6	-5,4443099	0,53147481
Cntnap2	CPU	naive	WT	13	8	5	-5,6508667	0,46278877
Cntnap2	NAC	dams	Neo+Arc KO	5	5	0	-5,0744524	0,65969718
Cntnap2	NAC	dams	Neo-Arc KO	7	7	0	-5,9141532	0,24754277
Cntnap2	NAC	dams	WT	9	9	0	-5,8353645	0,60024635
Cntnap2	NAC	naive	Neo+Arc KO	13	7	6	-5,2298469	0,61802584

Cntnap2	NAC	naive	WT	13	8	5	-5,709286	0,49444816
Cntnap2	PFC	dams	Neo+Arc KO	5	5	0	-7,1163131	0,39626381
Cntnap2	PFC	dams	Neo-Arc KO	7	7	0	-7,0430637	0,16671974
Cntnap2	PFC	dams	WT	9	9	0	-7,2199352	0,16188082
Cntnap2	PFC	naive	Neo+Arc KO	13	7	6	-5,98803	1,04303152
Cntnap2	PFC	naive	WT	10	5	5	-6,6673656	0,33032864
Cntnap2	PVN	dams	Neo+Arc KO	6	6	0	-6,1010666	0,21842681
Cntnap2	PVN	dams	Neo-Arc KO	7	7	0	-5,2883775	0,19613384
Cntnap2	PVN	dams	WT	8	8	0	-5,8946143	0,43292432
Cntnap2	PVN	naive	Neo+Arc KO	14	8	6	-3,5642416	1,80414061
Cntnap2	PVN	naive	WT	13	8	5	-3,8355144	1,49346237
Cntnap2	SON	dams	Neo+Arc KO	6	6	0	-6,1395078	0,08853755
Cntnap2	SON	dams	Neo-Arc KO	8	8	0	-5,9788715	0,27122194
Cntnap2	SON	dams	WT	7	7	0	-5,9853309	0,20532104
Cntnap2	SON	naive	Neo+Arc KO	13	7	6	-4,3950272	1,79383722
Cntnap2	SON	naive	WT	13	8	5	-5,1228294	0,56566659
Cpeb4	CPU	dams	Neo+Arc KO	6	6	0	-5,1023182	0,65474243
Cpeb4	CPU	dams	Neo-Arc KO	7	7	0	-5,1040101	0,17659617
Cpeb4	CPU	dams	WT	8	8	0	-5,0564996	0,23644236
Cpeb4	CPU	naive	Neo+Arc KO	14	8	6	-4,9718149	0,37709556
Cpeb4	CPU	naive	WT	13	8	5	-4,9294573	0,21496826
Cpeb4	NAC	dams	Neo+Arc KO	5	5	0	-4,7374265	0,27720987
Cpeb4	NAC	dams	Neo-Arc KO	8	8	0	-4,8617058	0,17925564
Cpeb4	NAC	dams	WT	10	10	0	-4,8773062	0,22749098
Cpeb4	NAC	naive	Neo+Arc KO	13	7	6	-4,5642123	0,6352815
Cpeb4	NAC	naive	WT	13	8	5	-4,9834594	0,18035351
Cpeb4	PFC	dams	Neo+Arc KO	6	6	0	-4,9178812	0,12011156
Cpeb4	PFC	dams	Neo-Arc KO	6	6	0	-4,9438764	0,07719273
Cpeb4	PFC	dams	WT	8	8	0	-4,9864291	0,07318755
Cpeb4	PFC	naive	Neo+Arc KO	13	7	6	-5,114812	0,27279561
Cpeb4	PFC	naive	WT	10	5	5	-5,0626483	0,21114229
Cpeb4	PVN	dams	Neo+Arc KO	6	6	0	-5,1066706	0,13049564
Cpeb4	PVN	dams	Neo-Arc KO	7	7	0	-4,6987785	0,07641059
Cpeb4	PVN	dams	WT	8	8	0	-5,0553821	0,2074659
Cpeb4	PVN	naive	Neo+Arc KO	14	8	6	-5,0569328	1,35022088
Cpeb4	PVN	naive	WT	13	8	5	-4,745126	1,03187263
Cpeb4	SON	dams	Neo+Arc KO	5	5	0	-5,2594726	0,16121716
Cpeb4	SON	dams	Neo-Arc KO	8	8	0	-4,8515583	0,17191947
Cpeb4	SON	dams	WT	8	8	0	-5,1480427	0,31234606
Cpeb4	SON	naive	Neo+Arc KO	13	7	6	-5,1554995	0,77060688
Cpeb4	SON	naive	WT	13	8	5	-5,6707375	0,52903766
Egr1	CPU	dams	Neo+Arc KO	6	6	0	-3,0705993	0,69153582
Egr1	CPU	dams	Neo-Arc KO	7	7	0	-3,5526452	0,52711062
Egr1	CPU	dams	WT	9	9	0	-3,3799588	0,79448439
Egr1	CPU	naive	Neo+Arc KO	14	8	6	-1,5759107	0,46939155
Egr1	CPU	naive	WT	13	8	5	-1,8023537	0,73682102
Egr1	NAC	dams	Neo+Arc KO	6	6	0	-3,8802447	0,6729407
Egr1	NAC	dams	Neo-Arc KO	8	8	0	-4,7561415	0,55764483
Egr1	NAC	dams	WT	10	10	0	-4,5078883	0,89182819
Egr1	NAC	naive	Neo+Arc KO	13	7	6	-2,8819772	0,52269854
Egr1	NAC	naive	WT	13	8	5	-3,3636896	0,58212299
Egr1	PFC	dams	Neo+Arc KO	6	6	0	-4,0704252	0,6665758
Egr1	PFC	dams	Neo-Arc KO	8	8	0	-5,1134951	0,65034374
Egr1	PFC	dams	WT	9	9	0	-4,6139142	0,6683017
Egr1	PFC	naive	Neo+Arc KO	13	7	6	-2,2154777	0,72330883
Egr1	PFC	naive	WT	10	5	5	-2,9181943	0,69160821
Esr1	CPU	dams	Neo+Arc KO	5	5	0	-10,725792	2,88029368
Esr1	CPU	dams	Neo-Arc KO	7	7	0	-13,138674	0,94072594
Esr1	CPU	dams	WT	9	9	0	-12,332073	1,55881858
Esr1	CPU	naive	Neo+Arc KO	14	8	6	-10,256074	2,83750125
Esr1	CPU	naive	WT	13	8	5	-11,254926	1,60938387
Esr1	NAC	dams	Neo+Arc KO	5	5	0	-12,657055	0,52577796
Esr1	NAC	dams	Neo-Arc KO	8	8	0	-12,037101	0,7092539
Esr1	NAC	dams	WT	10	10	0	-11,824294	0,71530351
Esr1	NAC	naive	Neo+Arc KO	13	7	6	-12,250225	0,94116786
Esr1	NAC	naive	WT	13	8	5	-12,29794	0,8219893
Esr1	PVN	dams	Neo+Arc KO	5	5	0	-8,1308618	0,62630639
Esr1	PVN	dams	Neo-Arc KO	7	7	0	-5,5919573	0,61115853
Esr1	PVN	dams	WT	8	8	0	-6,8431672	1,81128443
Esr1	PVN	naive	Neo+Arc KO	14	8	6	-5,8211832	1,18695634
Esr1	PVN	naive	WT	13	8	5	-6,6548729	0,80680811
Esr1	SON	dams	Neo+Arc KO	6	6	0	-10,060195	0,26772709
Esr1	SON	dams	Neo-Arc KO	8	8	0	-9,2813625	0,62078833
Esr1	SON	dams	WT	8	8	0	-9,7459692	0,75766004
Esr1	SON	naive	Neo+Arc KO	12	7	5	-9,0805565	1,49326452
Esr1	SON	naive	WT	13	8	5	-9,2743034	1,20328214
Fmr1	CPU	dams	Neo+Arc KO	5	5	0	-6,4207325	0,25091976
Fmr1	CPU	dams	Neo-Arc KO	7	7	0	-6,7221909	0,14382811
Fmr1	CPU	dams	WT	8	8	0	-6,4671115	0,25176027
Fmr1	CPU	naive	Neo+Arc KO	14	8	6	-5,9833001	0,40080097
Fmr1	CPU	naive	WT	13	8	5	-6,03366	0,42366141
Fmr1	NAC	dams	Neo+Arc KO	6	6	0	-7,0106411	0,38822623
Fmr1	NAC	dams	Neo-Arc KO	7	7	0	-6,9027136	0,28821277
Fmr1	NAC	dams	WT	10	10	0	-6,9108479	0,31951087
Fmr1	NAC	naive	Neo+Arc KO	13	7	6	-6,7182064	0,22572014
Fmr1	NAC	naive	WT	13	8	5	-6,9190881	0,2684046
Fmr1	PFC	dams	Neo+Arc KO	6	6	0	-6,4918114	0,30516213
Fmr1	PFC	dams	Neo-Arc KO	8	8	0	-6,6232172	0,19106453
Fmr1	PFC	dams	WT	9	9	0	-6,5283729	0,20331304
Fmr1	PFC	naive	Neo+Arc KO	13	7	6	-6,3814362	0,31532783

Fmr1	PFC	naive	WT	10	5	5	-6,5311196	0,34832414
Fmr1	PVN	dams	Neo+ Arc KO	6	6	0	-6,8038605	0,14830837
Fmr1	PVN	dams	Neo- Arc KO	7	7	0	-6,7584082	0,12411237
Fmr1	PVN	dams	WT	7	7	0	-6,8576885	0,09373914
Fmr1	PVN	naive	Neo+ Arc KO	14	8	6	-6,3338334	0,82106095
Fmr1	PVN	naive	WT	13	8	5	-6,3836881	0,6342381
Fmr1	SON	dams	Neo+ Arc KO	5	5	0	-6,7873707	0,13928162
Fmr1	SON	dams	Neo- Arc KO	8	8	0	-6,4811014	0,22366668
Fmr1	SON	dams	WT	7	7	0	-6,6417359	0,23192675
Fmr1	SON	naive	Neo+ Arc KO	13	7	6	-6,4813324	0,72410518
Fmr1	SON	naive	WT	13	8	5	-6,6157945	0,73872307
Fos	CPU	dams	Neo+ Arc KO	6	6	0	-8,4052796	0,9826842
Fos	CPU	dams	Neo- Arc KO	7	7	0	-8,997282	0,91352986
Fos	CPU	dams	WT	9	9	0	-9,2753357	1,29824777
Fos	CPU	naive	Neo+ Arc KO	14	8	6	-7,0464454	1,021191
Fos	CPU	naive	WT	13	8	5	-7,3131544	1,39387235
Fos	NAC	dams	Neo+ Arc KO	6	6	0	-8,5281479	0,471479
Fos	NAC	dams	Neo- Arc KO	8	8	0	-9,9348152	0,89268566
Fos	NAC	dams	WT	10	10	0	-9,9704889	1,02952305
Fos	NAC	naive	Neo+ Arc KO	13	7	6	-7,4304126	0,59137025
Fos	NAC	naive	WT	13	8	5	-7,7517079	0,54488165
Fos	PFC	dams	Neo+ Arc KO	6	6	0	-8,4013704	0,55996607
Fos	PFC	dams	Neo- Arc KO	8	8	0	-8,3835142	0,57212597
Fos	PFC	dams	WT	9	9	0	-8,6765164	0,60469139
Fos	PFC	naive	Neo+ Arc KO	13	7	6	-5,5960067	1,21929457
Fos	PFC	naive	WT	10	5	5	-6,7858727	1,00392409
Fos	PVN	dams	Neo+ Arc KO	6	6	0	-8,5720713	0,26551629
Fos	PVN	dams	Neo- Arc KO	5	5	0	-9,8034293	0,56869532
Fos	PVN	dams	WT	7	7	0	-9,4026841	0,66934931
Fos	PVN	naive	Neo+ Arc KO	14	8	6	-3,9268393	1,87438764
Fos	PVN	naive	WT	13	8	5	-4,9735965	1,00695579
Fos	SON	dams	Neo+ Arc KO	6	6	0	-8,7229723	0,16633043
Fos	SON	dams	Neo- Arc KO	8	8	0	-9,1551794	0,90589787
Fos	SON	dams	WT	7	7	0	-9,2343129	0,77981416
Fos	SON	naive	Neo+ Arc KO	13	7	6	-5,5409401	1,7322835
Fos	SON	naive	WT	13	8	5	-6,3558667	0,90213751
Foxp1	CPU	dams	Neo+ Arc KO	5	5	0	-4,8628995	0,32466067
Foxp1	CPU	dams	Neo- Arc KO	7	7	0	-5,0404725	0,20542957
Foxp1	CPU	dams	WT	8	8	0	-4,8451798	0,40381764
Foxp1	CPU	naive	Neo+ Arc KO	14	8	6	-3,8760126	0,72733653
Foxp1	CPU	naive	WT	13	8	5	-4,1024409	0,33236968
Foxp1	NAC	dams	Neo+ Arc KO	5	5	0	-5,4751844	0,29736587
Foxp1	NAC	dams	Neo- Arc KO	8	8	0	-5,7974927	0,22843197
Foxp1	NAC	dams	WT	9	9	0	-5,6502754	0,28324505
Foxp1	NAC	naive	Neo+ Arc KO	13	7	6	-5,3567727	0,67164785
Foxp1	NAC	naive	WT	13	8	5	-5,4846462	0,31007817
Foxp1	PFC	dams	Neo+ Arc KO	6	6	0	-7,2754381	0,37206762
Foxp1	PFC	dams	Neo- Arc KO	7	7	0	-7,065895	0,29344125
Foxp1	PFC	dams	WT	9	9	0	-6,8394586	0,47608727
Foxp1	PFC	naive	Neo+ Arc KO	13	7	6	-6,0285893	1,72944442
Foxp1	PFC	naive	WT	10	5	5	-6,8664366	0,53664902
Gal	CPU	dams	Neo+ Arc KO	3	3	0	-13,232943	1,29467933
Gal	CPU	dams	Neo- Arc KO	7	7	0	-13,344635	0,79592883
Gal	CPU	dams	WT	9	9	0	-12,925295	1,01434119
Gal	CPU	naive	Neo+ Arc KO	13	7	6	-10,620854	2,4334399
Gal	CPU	naive	WT	13	8	5	-10,153908	3,65784913
Gal	NAC	dams	Neo+ Arc KO	6	6	0	-11,223476	2,30505864
Gal	NAC	dams	Neo- Arc KO	8	8	0	-11,585157	0,81947217
Gal	NAC	dams	WT	9	9	0	-10,503259	1,71047667
Gal	NAC	naive	Neo+ Arc KO	13	7	6	-10,025153	2,148622
Gal	NAC	naive	WT	13	8	5	-10,306782	1,4121385
Gal	PVN	dams	Neo+ Arc KO	6	6	0	-7,2647193	1,16555039
Gal	PVN	dams	Neo- Arc KO	7	7	0	-2,2042408	0,85738229
Gal	PVN	dams	WT	8	8	0	-4,1786174	2,96556019
Gal	PVN	naive	Neo+ Arc KO	14	8	6	-4,8136502	1,31827184
Gal	PVN	naive	WT	13	8	5	-4,8807411	1,7171107
Gal	SON	dams	Neo+ Arc KO	6	6	0	-8,4731276	0,3760576
Gal	SON	dams	Neo- Arc KO	7	7	0	-8,8957682	1,58963846
Gal	SON	dams	WT	8	8	0	-8,4975312	1,01961013
Gal	SON	naive	Neo+ Arc KO	13	7	6	-5,4405301	3,23030902
Gal	SON	naive	WT	13	8	5	-7,5893883	1,34783158
Homer1a	CPU	dams	Neo+ Arc KO	5	5	0	-5,7000532	0,3838561
Homer1a	CPU	dams	Neo- Arc KO	7	7	0	-5,6816521	0,38052076
Homer1a	CPU	dams	WT	8	8	0	-5,952536	0,52782381
Homer1a	CPU	naive	Neo+ Arc KO	14	8	6	-4,7855297	0,52597004
Homer1a	CPU	naive	WT	13	8	5	-4,3178196	0,42912706
Homer1a	NAC	dams	Neo+ Arc KO	5	5	0	-6,4736264	0,26124845
Homer1a	NAC	dams	Neo- Arc KO	7	7	0	-6,9094074	0,73296794
Homer1a	NAC	dams	WT	10	10	0	-6,7475711	0,64968963
Homer1a	NAC	naive	Neo+ Arc KO	13	7	6	-5,731337	0,56065534
Homer1a	NAC	naive	WT	13	8	5	-6,1569781	0,42703751
Homer1a	PFC	dams	Neo+ Arc KO	6	6	0	-6,7775348	0,64995391
Homer1a	PFC	dams	Neo- Arc KO	8	8	0	-8,6942238	0,57694931
Homer1a	PFC	dams	WT	9	9	0	-7,7270155	0,90456193
Homer1a	PFC	naive	Neo+ Arc KO	13	7	6	-4,3155767	1,1674295
Homer1a	PFC	naive	WT	10	5	5	-5,3040898	0,73993092
Homer1a	PVN	dams	Neo+ Arc KO	6	6	0	-9,2670816	0,24221423
Homer1a	PVN	dams	Neo- Arc KO	6	6	0	-8,644378	0,43039593
Homer1a	PVN	dams	WT	8	8	0	-9,0349538	0,28529958
Homer1a	PVN	naive	Neo+ Arc KO	14	8	6	-4,4868893	1,92974212

Homer1a	PVN	naive	WT	13	8	5	-5,3637846	1,59239201
Homer1a	SON	dams	Neo+Arc KO	6	6	0	-8,7519731	0,30541682
Homer1a	SON	dams	Neo-Arc KO	8	8	0	-7,4888121	0,548243
Homer1a	SON	dams	WT	8	8	0	-7,8973682	0,87357386
Homer1a	SON	naive	Neo+Arc KO	13	7	6	-6,0672627	1,39142242
Homer1a	SON	naive	WT	13	8	5	-7,2321905	0,92682592
Oxt	CPU	dams	Neo+Arc KO	4	4	0	-7,4692601	0,70434055
Oxt	CPU	dams	Neo-Arc KO	7	7	0	-7,5129966	0,5183049
Oxt	CPU	dams	WT	9	9	0	-7,5397751	0,72065568
Oxt	CPU	naive	Neo+Arc KO	14	8	6	-6,5416905	2,79685246
Oxt	CPU	naive	WT	13	8	5	-7,5064923	1,51274927
Oxt	NAC	dams	Neo+Arc KO	5	5	0	-6,6400691	1,52789111
Oxt	NAC	dams	Neo-Arc KO	8	8	0	-8,6328262	1,21424903
Oxt	NAC	dams	WT	10	10	0	-8,055979	1,28055553
Oxt	NAC	naive	Neo+Arc KO	13	7	6	-7,5904452	2,49141749
Oxt	NAC	naive	WT	13	8	5	-7,4992065	1,40718048
Oxt	PFC	dams	Neo+Arc KO	5	5	0	-8,3789917	1,32813957
Oxt	PFC	dams	Neo-Arc KO	8	8	0	-7,480858	0,53130304
Oxt	PFC	dams	WT	8	8	0	-7,8895256	1,15488698
Oxt	PFC	naive	Neo+Arc KO	13	7	6	-5,0039506	4,23317646
Oxt	PFC	naive	WT	10	5	5	-6,8532388	2,53257507
Oxt	PVN	dams	Neo+Arc KO	6	6	0	-1,7301605	0,61447183
Oxt	PVN	dams	Neo-Arc KO	7	7	0	1,26879641	0,63412391
Oxt	PVN	dams	WT	8	8	0	-0,0905661	2,3592462
Oxt	PVN	naive	Neo+Arc KO	14	8	6	0,79575591	1,06435022
Oxt	PVN	naive	WT	13	8	5	0,40319247	1,12141106
Oxt	SON	dams	Neo+Arc KO	6	6	0	-4,0192874	1,52493774
Oxt	SON	dams	Neo-Arc KO	7	7	0	-4,4841778	3,03330585
Oxt	SON	dams	WT	8	8	0	-5,0267502	1,92056433
Oxt	SON	naive	Neo+Arc KO	13	7	6	-2,637814	3,01399324
Oxt	SON	naive	WT	13	8	5	-3,9270084	2,63748412
Oxtr	CPU	dams	Neo+Arc KO	4	4	0	-8,2825512	1,74610185
Oxtr	CPU	dams	Neo-Arc KO	7	7	0	-7,9329081	0,77256359
Oxtr	CPU	dams	WT	9	9	0	-7,6547974	0,99851111
Oxtr	CPU	naive	Neo+Arc KO	14	8	6	-5,7327587	3,07229164
Oxtr	CPU	naive	WT	13	8	5	-7,7870226	2,21208252
Oxtr	NAC	dams	Neo+Arc KO	6	6	0	-6,433319	1,09687908
Oxtr	NAC	dams	Neo-Arc KO	8	8	0	-8,3739547	0,64772827
Oxtr	NAC	dams	WT	9	9	0	-8,0200012	1,27069506
Oxtr	NAC	naive	Neo+Arc KO	13	7	6	-6,120188	2,83950284
Oxtr	NAC	naive	WT	13	8	5	-6,0432848	2,83122637
Oxtr	PFC	dams	Neo+Arc KO	6	6	0	-9,0460243	0,67945224
Oxtr	PFC	dams	Neo-Arc KO	8	8	0	-6,7294499	0,27469091
Oxtr	PFC	dams	WT	9	9	0	-7,3196782	0,68078239
Oxtr	PFC	naive	Neo+Arc KO	13	7	6	-4,6085918	3,87849433
Oxtr	PFC	naive	WT	10	5	5	-7,1456074	1,61167262
Oxtr	PVN	dams	Neo+Arc KO	5	5	0	-10,130111	0,36513476
Oxtr	PVN	dams	Neo-Arc KO	7	7	0	-8,053941	0,42250825
Oxtr	PVN	dams	WT	8	8	0	-8,4666257	1,21524214
Oxtr	PVN	naive	Neo+Arc KO	14	8	6	-1,8296123	2,37867369
Oxtr	PVN	naive	WT	13	8	5	-3,9852173	2,63225821
Oxtr	SON	dams	Neo+Arc KO	6	6	0	-9,1106566	1,10447821
Oxtr	SON	dams	Neo-Arc KO	8	8	0	-7,2800167	0,4098787
Oxtr	SON	dams	WT	8	8	0	-8,2170164	0,9653421
Oxtr	SON	naive	Neo+Arc KO	13	7	6	-4,1649561	3,36214835
Oxtr	SON	naive	WT	13	8	5	-5,6932294	2,05404762
Shank3	CPU	dams	Neo+Arc KO	5	5	0	-3,2800856	0,18449238
Shank3	CPU	dams	Neo-Arc KO	7	7	0	-3,104177	0,37499371
Shank3	CPU	dams	WT	8	8	0	-2,9115396	0,44150473
Shank3	CPU	naive	Neo+Arc KO	14	8	6	-2,6494257	0,50867547
Shank3	CPU	naive	WT	13	8	5	-2,4147698	0,3139888
Shank3	NAC	dams	Neo+Arc KO	6	6	0	-3,8505214	0,20315787
Shank3	NAC	dams	Neo-Arc KO	7	7	0	-3,4092913	0,19096008
Shank3	NAC	dams	WT	10	10	0	-3,4379915	0,24310901
Shank3	NAC	naive	Neo+Arc KO	13	7	6	-3,4367832	0,29852321
Shank3	NAC	naive	WT	13	8	5	-3,4088758	0,32511257
Shank3	PFC	dams	Neo+Arc KO	6	6	0	-4,16509	0,39073504
Shank3	PFC	dams	Neo-Arc KO	8	8	0	-4,3990954	0,23794146
Shank3	PFC	dams	WT	7	7	0	-4,3987431	0,15027721
Shank3	PFC	naive	Neo+Arc KO	13	7	6	-3,3230187	0,91819765
Shank3	PFC	naive	WT	10	5	5	-3,9154183	0,5269285
Shank3	PVN	dams	Neo+Arc KO	5	5	0	-4,5300054	0,19152315
Shank3	PVN	dams	Neo-Arc KO	7	7	0	-4,6082618	0,28136207
Shank3	PVN	dams	WT	8	8	0	-4,7335938	0,15398088
Shank3	PVN	naive	Neo+Arc KO	14	8	6	-5,1493724	0,80795964
Shank3	PVN	naive	WT	13	8	5	-4,7950403	0,28607794
Shank3	SON	dams	Neo+Arc KO	6	6	0	-5,1092291	0,1322453
Shank3	SON	dams	Neo-Arc KO	8	8	0	-4,1191803	0,27592264
Shank3	SON	dams	WT	8	8	0	-4,4513586	0,42595823
Shank3	SON	naive	Neo+Arc KO	13	7	6	-4,5235792	0,37200809
Shank3	SON	naive	WT	13	8	5	-4,6179631	0,34517717

structure	var_s5	.y.	condition	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
CPU	Avp	value_s4	dams	Neo+ Arc KO	WT	6	9	3,01930547	0,00253355	0,00760065	**
PVN	Cck	value_s4	dams	Neo+ Arc KO	WT	5	8	-2,5647226	0,01032583	0,02065166	*
PVN	Cntnap2	value_s4	dams	Neo- Arc KO	WT	7	8	-2,7080642	0,00676769	0,01353539	*
PVN	Cpeb4	value_s4	dams	Neo- Arc KO	WT	7	8	-2,7414284	0,00611727	0,01223454	*
NAC	Fos	value_s4	dams	Neo+ Arc KO	WT	6	10	-2,7568702	0,00583575	0,01750725	*
PVN	Fos	value_s4	dams	Neo+ Arc KO	WT	6	7	-2,2526181	0,02428324	0,04856648	*
NAC	Oxtr	value_s4	dams	Neo+ Arc KO	WT	6	9	-2,3157203	0,02057355	0,04114709	*
PFC	Oxtr	value_s4	dams	Neo+ Arc KO	WT	6	9	2,39342901	0,01669171	0,03338342	*
PVN	Oxtr	value_s4	dams	Neo+ Arc KO	WT	5	8	2,63884757	0,00831884	0,01761918	*
NAC	Shank3	value_s4	dams	Neo+ Arc KO	WT	6	10	2,61726777	0,00886368	0,01772736	*
SON	Shank3	value_s4	dams	Neo+ Arc KO	WT	6	8	2,55446045	0,01063525	0,0212705	*
SON	Homer1a	value_s4	naive	Neo+ Arc KO	WT	13	13	-2,025641	0,04280158	0,04280158	*
PFC	Oxtr	value_s4	naive	Neo+ Arc KO	WT	13	10	-1,9845558	0,04719392	0,04719392	*
PVN	Oxtr	value_s4	naive	Neo+ Arc KO	WT	14	13	-2,0380987	0,04154007	0,04154007	*

Table S6. List of all primers used for genotyping and qPCR

ID	accession ID	gene	forward	Reverse	cDNA tissue	R square	average Ct
<i>Oxt</i>	NM_011025	oxytocin	ACCATCACCTACAGCGGATCT	CCGAGGTCTCAGAGCCAGTAAG	olfactory bulb	0,998	29,0
<i>Oxtr</i>	NM_001081147	oxytocin receptor	CTTAGGGCCAAAAGGTGTCA	GCAGGTTTCTATGCCCTCTG	olfactory bulb	0,892	27,3
<i>Avp</i>	NM_009732	Arginine vasopressine	ACACTACGCTCTCCGCTTGT	CACTGTCTCAGTCCATGTCA	olfactory bulb	0,986	30,2
<i>Avpr1a 2</i>	NM_016847.2	Arginine vasopressine receptor 1A	CCTCTGTCTGGACACCTTTCTT	AAGGGTTTTCGGAATCGGTCC	olfactory bulb	0,902	31,6
<i>Homer1a</i>	NM_011982.4	homer scaffolding protein 1 transcript variant S	TGAAAAATCTCAGGTCTCAGACTCCT	GCTCAATGCTCCTTTTTCCACA	olfactory bulb	0,994	24,5
<i>Fos</i>	NM_010234	FBJ osteosarcoma oncogene	GAAGGGAAACGGAATAAGATG	CATCTTCAAGTTGATCTGTCTC	olfactory bulb	0,972	24,3
<i>Egr1</i>	NM_007913	early growth response 1	CCACTGACCAAGAGTCCCTT	CGCCAGTATAGGTGATGGG	olfactory bulb	0,970	20,1
<i>Foxp1</i>	NM_053202	forkhead box P1	CCACTGTAACCTGAAGCGGT	GCGGCAGCACAGATACAAAG	olfactory bulb	0,992	25,5
<i>Shank3</i>	NM_021423	SH3/ankyrin domain gene 3	CTCACCACAGAGAGGATCA	AGCGGAACCTGACCTGTAAG	olfactory bulb	0,969	22,3
<i>Fmr1</i>	NM_008031	fragile X messenger ribonucleoprotein 1	CCACGTAATCCAAGAGAGGCT	TTACGATCTTACCCTGCGG	olfactory bulb	0,961	23,5
<i>Cpeb4</i>	NM_026252	cytoplasmic polyadenylation element binding protein 4	AGAAGGGAACTTTATTTAAGTGCG	ACTACAACCTCCCATACACA	olfactory bulb	0,943	21,8
<i>Cntnap2</i>	NM_001004357	contactin associated protein-like 2	GTCTTCAGCCACTGACCCCTT	TATAGCTTGGCCTTGTCTGG	olfactory bulb	0,999	22,4
<i>Cck</i>	NM_001284508	cholecystokinin	TCCCATCCAAAGCCATGAA	AGCTTCTGCAGGGACTACCG	olfactory bulb	0,981	24,1
<i>Gal</i>	NM_010253.4	galanin and GMAP prepropeptide	TAGGCTGGCTCTGTGGTT	TCTTCTCTTTGACGGCATC	paraventricular nucleus	0,997	29,7
<i>Cartpt</i>	NM_013732	CART prepropeptide	AAGAAGTACGGCCAAAGTCCC	CAGTCAACAGCTTCCCGAT	Striatum	0,995	25,8
<i>Esr1</i>	NM_007956.5	estrogen receptor 1 alpha	AAGAGAGTGCAGGCTTTGG	CGCCAGACGACCAATCAT	paraventricular nucleus	0,963	32,1
<i>Gapdh</i>	NM_008084	glyceraldehyde-3-phosphate dehydrogenase	ATGGCCCTCCGTGTCTCTAC	TCAGATGCCTGCTTACCAC	olfactory bulb	0,974	17,1

Primer	Short name	Full name	5'->3' sequence	source
for genotyping	Rg Mut	Arc Mutant Reverse 15020 (Jax)	CTGAACTTGTGGCCGTTTAC	Jackson Laboratory
for genotyping	Fg com	Arc Common 25422 (Jax)	CACCGACGACCAGATGGAG	Jackson Laboratory
for genotyping	Rg WT	Arc Wild type Reverse 25423 (Jax)	GTGCAACCCTTTCAGCTCTC	Jackson Laboratory
for Neomycin cassette	Neo3	Neo3 (Rev)	CAAGCTCTTCAGCAATATCACGGG	PMID: 30865697
for Neomycin cassette	Neo4	Neo4 (Fw)	CCTGTCCGGTGCCTGAATGAACT	PMID: 30865697
for Neomycin cassette	F Neo	Neomycin For	CTTGGGTGGAGAGGCTATTC	universal from Eurogentec
for Neomycin cassette	R Neo	Neomycin Rev	AGGTGAGATGACAGGAGATC	universal from Eurogentec
Other	F1	F1 Forward pair 1	CAGAGCTCAAGCGAGTTCTCC	design <i>de novo</i>
Other	R1	R1 Reverse pair 1	GGATGTCCCCTGGGTTTTGG	design <i>de novo</i>
Other	F2	F2 Forward pair 2	GCTCAAGCGAGTTCTCCC	design <i>de novo</i>
Other	R2	R2 Reverse pair 2	ATCCCCGGAAGTTGAGGTTT	design <i>de novo</i>
for qPCR	Fq1	qPCR Arc-F	CCAGGAGAATGACACCAG	TableS6_qPCR
for qPCR	Rq1	qPCR Arc-R	TTCAGGAGAAGAGAGGATG	TableS6_qPCR
for qPCR	Fq2	qPCR Arc-F2	GAGCTGAAGCCACAAATGCAG	TableS6_qPCR
for qPCR	Rq2	qPCR Arc-R2	CACTGGTATGAATCACTGCTGG	TableS6_qPCR

Table S7. List of genes dysregulated identified by RNA sequencing

BaseMean are the average number of counts for the 9 animals. Cellular component, Molecular function and Biological process come Gene Ontology (GO) keyword annotations.

gene	baseMean	log2FoldChange	lfcSE	stat	pvalue	padj	signif	comparison	database	Cellular Component	Molecular function	Biological process
9030624G23Rik	19,17509563	-4,182074755	0,922728131	-4,532293548	5,83467E-06	0,006130414	DOWN in Neo+ KO1	Neo_Other		nucleus	zinc ion binding	regulation of DNA-tem
Acp1	1243,518537	-0,788016903	0,13228759	-5,956846778	2,57151E-09	5,40371E-06	DOWN in Neo+ KO1	Neo_Other		Cytoplasm	Hydrolase, Protein phosphatase	
Arc	315,6778798	-2,223771845	0,341858424	-6,50494967	7,77194E-11	2,61308E-07	DOWN in Neo+ KO1	Neo_Other		Cell membrane, C	Developmental pr	Endocytosis, Transpor
Arhgap33os	14,72721739	-4,649312363	1,060948006	-4,382224519	1,17474E-05	0,010971387	DOWN in Neo+ KO1	Neo_Other		intercellular bridg	ATP binding, prot	attachment of spindle
Atp6v0c-ps2	3896,130303	-6,563871963	0,905178112	-7,251470046	4,12272E-13	2,31024E-09	DOWN in Neo+ KO1	Neo_Other		Membrane		
Catspere1	45,7170293	-8,708531606	1,219341525	-7,141995433	9,19857E-13	3,86593E-09	DOWN in Neo+ KO1	Neo_Other		CatSper complex, Cell membrane, Ce	flagellated sperm moti	
Catspere2	123,973267	-2,126093519	0,489790855	-4,340819142	1,41953E-05	0,01255981	DOWN in Neo+ KO1	Neo_Other		CatSper complex	flagellated sperm moti	
Col6a1	572,8085316	1,794438227	0,381833588	4,699529546	2,60761E-06	0,003131187	UP in Neo+ KO1	Neo_Other		Extracellular matr	collagen binding, Cell adhesion	
Crym	254,3301245	3,503636726	0,870615374	4,024322142	5,71397E-05	0,04002395	UP in Neo+ KO1	Neo_Other		Cytoplasm	Oxidoreductase	
Fcrls	137,3334563	-1,536971439	0,124987678	-6,053458471	1,41769E-09	3,40467E-06	UP in Neo+ KO1	Neo_Other	sdbz.org	Cell membrane, m	transmembrane si	cell surface receptor si
Gm33887	463,9358063	-1,061706506	0,182091259	-5,83062862	5,5219E-09	1,03143E-05	DOWN in Neo+ KO1	Neo_Other				
Hddc3	377,0954836	-2,126093519	0,323720773	-4,913883463	8,92898E-07	0,001250876	DOWN in Neo+ KO1	Neo_Other			Hydrolase	
Hmga1b	206,4281902	-4,588394703	0,793441971	-5,7828989	7,34242E-09	1,23433E-05	DOWN in Neo+ KO1	Neo_Other			DNA-binding	Transcription, Trans
Hspa8	43456,47738	-0,350427463	0,082248555	-4,260591133	2,03887E-05	0,017137715	DOWN in Neo+ KO1	Neo_Other		Cell membrane, C	Chaperone, Hydr	Autophagy, mRNA p
Ints7	603,220904	0,756607717	0,124987678	6,053458471	1,41769E-09	3,40467E-06	UP in Neo+ KO1	Neo_Other	sdbz.org	Chromosome, Cytoplasm, Nucleus	DNA damage	
lpw	17,1102976	0,809843989	1,052306612	7,640210462	2,16867E-14	1,82288E-10	UP in Neo+ KO1	Neo_Other				
Itga10	86,12733971	-1,302201509	0,2914042	-4,537345407	5,69688E-06	0,006130414	DOWN in Neo+ KO1	Neo_Other		Membrane	Integrin, Recept	Cell adhesion
Kcnj10	11522,59146	-0,688001869	0,170633018	-4,032055904	5,5291E-05	0,04002395	DOWN in Neo+ KO1	Neo_Other		Cell membrane, N	ion channel, Volt	ion transport, Potass
Phf1	967,2598913	-0,826251608	0,174744467	-4,728342024	2,26361E-06	0,002927191	DOWN in Neo+ KO1	Neo_Other		Endoplasmic reticulum, Golgi apparatus, Membrane		
Rpl34	2034,259124	-1,436195426	0,25006879	-5,743201403	9,29031E-09	1,41981E-05	DOWN in Neo+ KO1	Neo_Other		Cytoplasm, Endor	Ribonucleoprotein, Ribosomal protein	
Rps15a-ps6	202,108115	-6,117724108	0,583223366	-10,48950448	9,65333E-26	1,62282E-21	DOWN in Neo+ KO1	Neo_Other				
Sik1	1073,003474	0,404295222	0,09832883	4,111665146	3,92816E-05	0,030016479	UP in Neo+ KO1	Neo_Other		Cytoplasm, Nucle	Developmental	Biological rhythms, (
Trim34b	7,830258282	-6,136687911	1,537249174	-3,991992981	6,55203E-05	0,044058479	DOWN in Neo+ KO1	Neo_Other		Cytoplasm, Mitoc	Transferase	Antiviral defense
Xntrpc	11,99084473	-6,775337055	1,606376883	-4,217775496	2,46724E-05	0,019750866	DOWN in Neo+ KO1	Neo_Other		Membrane, Nucle	Calcium channel, Calcium transport, Ion	
Zkscan8	760,6731644	0,840302183	0,133102032	6,313218296	2,73292E-10	7,65717E-07	UP in Neo+ KO1	Neo_Other		Nucleus	DNA-binding	Transcription, Trans

gene	baseMean	log2FoldChan	lfcSE	stat	pvalue	padj	signif	comparison
Asap1	1519,0988	-0,6581759	0,1438333	4,5759632	4,74E-06	0,0398591	DOWN in Neo+ KO1/Neo- KO1	WT_Arc
Gm14430	74,128439	22,933039	3,434745	-6,6767808	2,442E-11	4,108E-07	UP in Neo+ KO1/Neo- KO1	WT_Arc

gene	baseMean	log2FoldChan	lfcSE	stat	pvalue	padj	signif	comparison
2900052N01Rik	4715,2835	1,5570725	0,3454121	4,5078696	6,548E-06	0,0078653	UP in Neo+ KO1	WT_Neo+Arc
Acp1	1243,5185	-0,7887157	0,1638713	-4,8130203	1,487E-06	0,0023162	DOWN in Neo+ KO1	WT_Neo+Arc
Arc	315,677788	-2,5643484	0,3382716	-7,5807372	3,436E-14	5,778E-10	DOWN in Neo+ KO1	WT_Neo+Arc
Asap1	1519,0988	-0,780407	0,1571374	-4,9663993	6,821E-07	0,0012744	DOWN in Neo+ KO1	WT_Neo+Arc
Atp6v0c-ps2	3896,1303	-6,1460842	1,0749308	-5,7176554	1,08E-08	3,632E-05	DOWN in Neo+ KO1	WT_Neo+Arc
Catspere1	45,717029	-8,7585199	1,2450101	-7,0348985	1,994E-12	1,677E-08	DOWN in Neo+ KO1	WT_Neo+Arc
Dnah7b	270,77584	-1,4656207	0,2761368	-5,307589	1,111E-07	0,0003113	DOWN in Neo- KO1	WT_Neo-Arc
Entpd4	60,449028	-21,182241	3,9081329	-5,4200412	5,959E-08	0,0001431	DOWN in Neo+ KO1	WT_Neo+Arc
Erdr1	596,5393	-2,1339684	0,2130785	-10,014939	1,31E-23	1,907E-19	DOWN in Neo- KO1	WT_Neo-Arc
Fam205a3	28,783757	22,158736	3,9084178	5,6694901	1,432E-08	4,014E-05	UP in Neo+ KO1	WT_Neo+Arc
Fam205a3	28,783757	21,706591	3,9097745	5,5518781	2,826E-08	9,505E-05	UP in Neo- KO1	WT_Neo-Arc
Gm14308	67,312356	-21,721286	3,9074932	-5,55888	2,715E-08	9,505E-05	DOWN in Neo- KO1	WT_Neo-Arc
Gm29804	27,16289	-20,216096	3,9089622	-5,1717298	2,319E-07	0,0005572	DOWN in Neo- KO1	WT_Neo-Arc
Gm33887	463,93581	-0,9943719	0,2188729	-4,5431477	5,542E-06	0,0071688	DOWN in Neo+ KO1	WT_Neo+Arc
Gm5859	30,830701	-20,055239	3,9092249	-5,1302342	2,894E-07	0,0006083	DOWN in Neo- KO1	WT_Neo-Arc
Hmga1b	206,42819	-4,3929683	0,9539953	-4,6048112	4,128E-06	0,0057853	DOWN in Neo+ KO1	WT_Neo+Arc
Ints7	603,2209	0,7510136	0,1561608	4,8092331	1,515E-06	0,0023162	UP in Neo+ KO1	WT_Neo+Arc
lpw	17,110298	8,2111915	1,4134649	5,8092644	6,275E-09	2,638E-05	UP in Neo+ KO1	WT_Neo+Arc
Itga10	86,12734	-1,4369272	0,3440925	-4,1759912	2,967E-05	0,029348	DOWN in Neo+ KO1	WT_Neo+Arc
Mid1	547,3545	0,9787841	0,2300388	4,2548651	2,092E-05	0,0219843	UP in Neo+ KO1	WT_Neo+Arc
Mid1	547,3545	-2,4397037	0,244937	-9,9605343	2,268E-23	1,907E-19	DOWN in Neo- KO1	WT_Neo-Arc
Rpl34	2034,2591	-1,2635452	0,2896079	-4,3629512	1,283E-05	0,0143855	DOWN in Neo+ KO1	WT_Neo+Arc
Rpl34-ps1	778,30958	-6,8650392	1,2007623	-5,7172343	1,083E-08	6,069E-05	DOWN in Neo- KO1	WT_Neo-Arc
Rps15a-ps6	202,10812	-6,0430277	0,9433242	-6,4060988	1,493E-10	8,368E-07	DOWN in Neo+ KO1	WT_Neo+Arc
Xntrpc	11,990845	-7,2621194	1,7453574	-4,1608208	3,171E-05	0,0296247	DOWN in Neo+ KO1	WT_Neo+Arc
Zkscan8	760,67316	0,8558435	0,1650286	5,1860306	2,148E-07	0,0004516	UP in Neo+ KO1	WT_Neo+Arc

term_id	term_name	source	intersection	term_size	query_size	intersection_size	p_value	precision	recall	effective_domain_size	source_order	parents
GO:0007229	integrin-mediated signaling pathway	GO:BP	Lamb1,Igfb8,Igfbp1,Lama1,Igfb5,Igfb7,Igfbp1	101	34	7	1.14853E-07	0.205882353	0.069306931	24936	2644	GO:00071166
GO:0002181	cytoplasmic translation	GO:BP	Rps15,Rps15,Rps15,Rpl34,Rps2,Rpl23,Rpl11	184	34	7	7.7891E-06	0.205882353	0.038043478	24936	709	GO:0006412
GO:0007155	cell adhesion	GO:BP	Col6a1,Lamb1,Igfb8,Igfbp1,Lama1,Igfb5,Col	1305	34	10	0.009930888	0.294117647	0.007662835	24936	2585	GO:0009987
GO:1901798	positive regulation of signal transduction by p53 class mediator	GO:BP	Rps15,Rpl23,Rpl11	30	34	3	0.01478815	0.088235294	0.1	24936	20309	GO:0072331,GO:1901796,GO:1902533
GO:0071714	basement membrane organization	GO:BP	Col6a1,Lamb1,Lama1	33	34	3	0.06174617	0.088235294	0.090990901	24936	15734	GO:0009819
GO:0110011	regulation of basement membrane organization	GO:BP	Lamb1,Lama1	5	34	2	0.02903019	0.058823529	0.2	24936	18081	GO:0071711,GO:1903053
GO:0006412	translation	GO:BP	Rps15,Rps15,Rps15,Rpl34,Rps2,Rpl23,Rpl11	1678	34	7	0.048742444	0.205882353	0.010324484	24936	2062	GO:0009059,GO:0019538,GO:0160307
GO:160307	protein biosynthetic process	GO:BP	Rps15,Rps15,Rps15,Rpl34,Rps2,Rpl23,Rpl11	678	34	7	0.048742444	0.205882353	0.010324484	24936	19039	GO:0009059,GO:0010467,GO:0160307
GO:0098636	protein complex involved in cell adhesion	GO:CC	Lamb1,Igfb8,Igfbp1,Lama1,Igfb7,Igfbp1	53	40	6	4.44825E-08	0.15	0.113202547	25413	3154	GO:0032991
GO:0022626	cytosolic ribosome	GO:CC	Rps15,Rps15,Rps15,Rpl34,Rps2,Rpl23,Rpl11	113	40	7	9.36789E-08	0.175	0.061946903	25413	813	GO:0005829,GO:0005840
GO:0043251	basement membrane organization	GO:BP	Col6a1,Lamb1,Lama1	33	40	3	0.06174617	0.088235294	0.090990901	25413	2038	GO:0005840,GO:1909094
GO:0008305	integrin complex	GO:CC	Igfb8,Igfbp1,Igfb7,Igfbp1	28	40	4	2.08781E-05	0.1	0.142857143	25413	489	GO:0098636,GO:0098802
GO:0005581	collagen trimer	GO:CC	Col6a1,Col9a1,Col4a4,Col6a6,Col9a3	84	40	5	4.18559E-05	0.125	0.05952381	25413	197	GO:0032991
GO:0032991	protein-containing complex	GO:CC	Col6a1,Lamb1,Hsp98,Atp6v0c,Igfb8,Rps15	6617	40	26	5.1496E-05	0.65	0.003929273	25413	1311	GO:0005575
GO:0140139	solid phase of basement membrane	GO:CC	Lamb1,Lama1,Col4a4	14	40	3	0.000258804	0.075	0.214285714	25413	3466	GO:0005604,GO:0030312
GO:0022625	cytosolic large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	58	40	4	0.000418159	0.1	0.068965517	25413	832	GO:0015934,GO:0022626
GO:0031012	extracellular matrix	GO:CC	Col6a1,Lamb1,Lama1,Col9a1,Col4a4,Col6a6	249	40	6	0.000443879	0.15	0.024096386	25413	1000	GO:0030312
GO:0036128	Catsper complex	GO:CC	Catsperg1,Catsper2,Catsper1	17	40	3	0.000481898	0.075	0.176470588	25413	1651	GO:0005891
GO:0030312	external encapsulating structure	GO:CC	Col6a1,Lamb1,Lama1,Col9a1,Col4a4,Col6a6	251	40	6	0.000504657	0.15	0.022904382	25413	902	GO:0071344,GO:0110165
GO:0005840	ribosome	GO:CC	Rps15,Rps15,Rps15,Rpl34,Rps2,Rpl23,Rpl11	403	40	7	0.0005662	0.175	0.017369727	25413	376	GO:0043292
GO:0005606	laminin-111 trimer	GO:CC	Lamb1,Lama1	3	40	2	0.001442162	0.05	0.666666667	25413	219	GO:0043256
GO:0015471	vacuolar proton-transferring V-type ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	26	40	3	0.001824533	0.075	0.115384615	25413	723	GO:0005774,GO:0033176
GO:0031176	proton-transferring V-type ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	28	40	3	0.002258988	0.075	0.107142857	25413	1362	GO:0016469,GO:0090533,GO:1904949
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40	3	0.005387477	0.075	0.081081081	25413	834	GO:0015935,GO:0022626
GO:0015934	large ribosomal subunit	GO:CC	Rpl5,Rpl34,Rpl23,Rpl11	118	40	4	0.007066376	0.1	0.033898305	25413	688	GO:0044391
GO:0098533	cation-transferring ATPase complex	GO:CC	Atp6v0c,Tmem199,Spar	43	40	3	0.008501036	0.075	0.069797442	25413	2775	GO:0098533
GO:0098796	membrane protein complex	GO:CC	Atp6v0c,Igfb8,Igfbp1,Catsperg1,Tmem199	1194	40	10	0.002345542	0.25	0.008375209	25413	3186	GO:0016020,GO:0032991
GO:0005604	basement membrane	GO:CC	Col6a1,Lamb1,Lama1,Col4a4	92	40	4	0.002649847	0.1	0.043478261	25413	218	GO:0030312
GO:0022627	cytosolic small ribosomal subunit	GO:CC	Rps15,Rps15,Rps2	37	40							

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