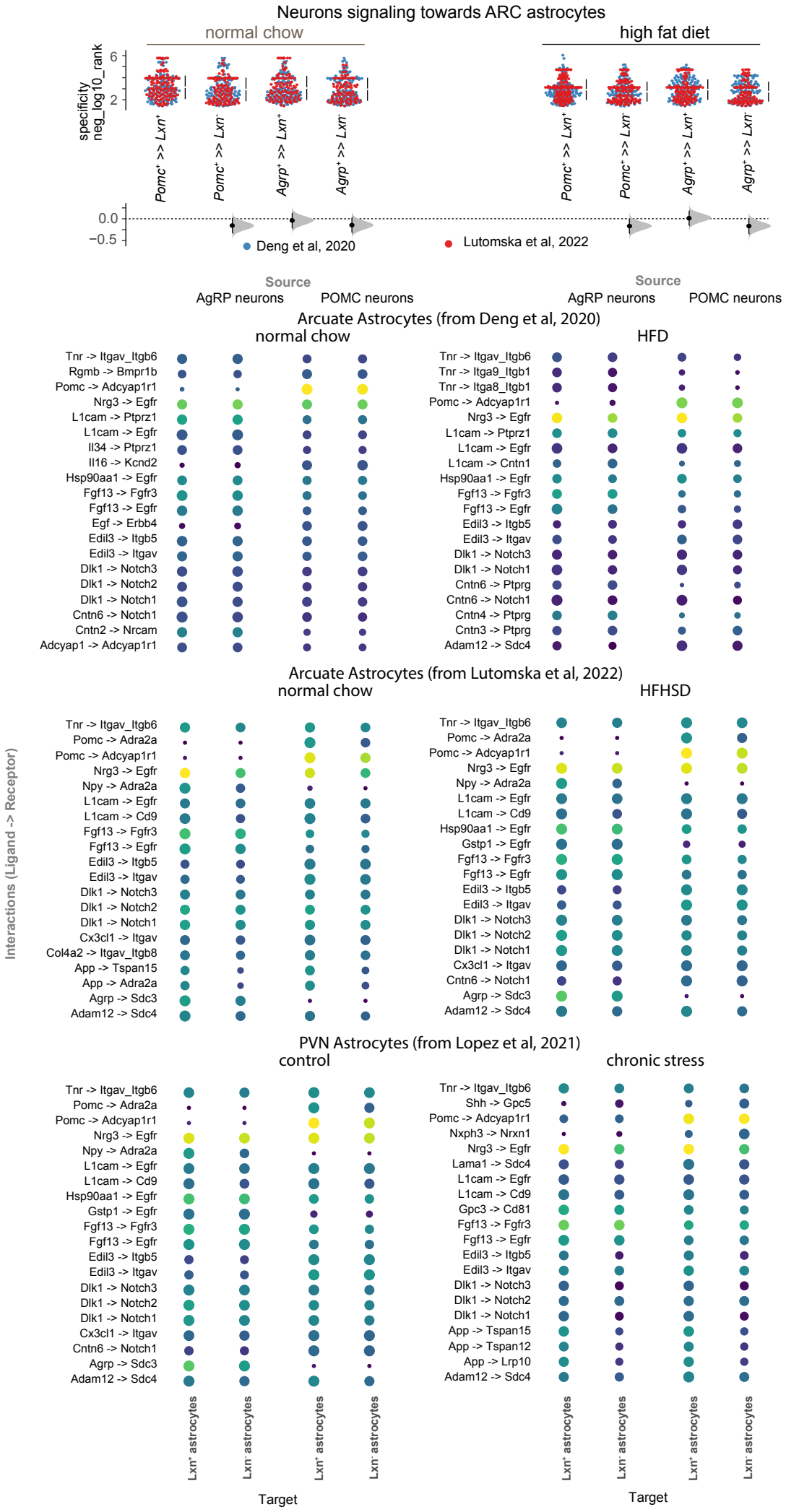
Neurons signaling towards ARC astrocytes
normal chow
high fat diet
specificity neg_log10_rank
6
2
0.0
−0.5
Pomc+ >> Lxn+
Pomc+ >> Lxn-
Agrp+ >> Lxn+
Agrp+ >> Lxn-
Deng et al, 2020
Lutomska et al, 2022
Source
AgRP neurons
POMC neurons
Arcuate Astrocytes (from Deng et al, 2020)
normal chow
HFD
Tnr -> Itgav_Itgb6
Rgmb -> Bmpr1b
Pomc -> Adcyap1r1
Nrg3 -> Egfr
L1cam -> Ptprz1
L1cam -> Egfr
Il34 -> Ptprz1
Il16 -> Kcnd2
Hsp90aa1 -> Egfr
Fgf13 -> Fgfr3
Fgf13 -> Egfr
Egf -> Erbb4
Edil3 -> Itgb5
Edil3 -> Itgav
Dlk1 -> Notch3
Dlk1 -> Notch2
Dlk1 -> Notch1
Cntn6 -> Notch1
Cntn2 -> Nrcam
Adcyap1 -> Adcyap1r1
Tnr -> Itgav_Itgb6
Tnr -> Itga9_Itgb1
Tnr -> Itga8_Itgb1
Pomc -> Adcyap1r1
Nrg3 -> Egfr
L1cam -> Ptprz1
L1cam -> Egfr
L1cam -> Cntn1
Hsp90aa1 -> Egfr
Fgf13 -> Fgfr3
Fgf13 -> Egfr
Edil3 -> Itgb5
Edil3 -> Itgav
Dlk1 -> Notch3
Dlk1 -> Notch1
Cntn6 -> Ptprg
Cntn6 -> Notch1
Cntn4 -> Ptprg
Cntn3 -> Ptprg
Adam12 -> Sdc4
Arcuate Astrocytes (from Lutomska et al, 2022)
normal chow
HFHSD
Interactions (Ligand -> Receptor)
Tnr -> Itgav_Itgb6
Pomc -> Adra2a
Pomc -> Adcyap1r1
Nrg3 -> Egfr
Npy -> Adra2a
L1cam -> Egfr
L1cam -> Cd9
Fgf13 -> Fgfr3
Fgf13 -> Egfr
Edil3 -> Itgb5
Edil3 -> Itgav
Dlk1 -> Notch3
Dlk1 -> Notch2
Dlk1 -> Notch1
Cx3cl1 -> Itgav
Col4a2 -> Itgav_Itgb8
App -> Tspan15
App -> Adra2a
Agrp -> Sdc3
Adam12 -> Sdc4
Tnr -> Itgav_Itgb6
Pomc -> Adra2a
Pomc -> Adcyap1r1
Nrg3 -> Egfr
Npy -> Adra2a
L1cam -> Egfr
L1cam -> Cd9
Hsp90aa1 -> Egfr
Gstp1 -> Egfr
Fgf13 -> Fgfr3
Fgf13 -> Egfr
Edil3 -> Itgb5
Edil3 -> Itgav
Dlk1 -> Notch3
Dlk1 -> Notch2
Dlk1 -> Notch1
Cx3cl1 -> Itgav
Cntn6 -> Notch1
Agrp -> Sdc3
Adam12 -> Sdc4
PVN Astrocytes (from Lopez et al, 2021)
control
chronic stress
Tnr -> Itgav_Itgb6
Pomc -> Adra2a
Pomc -> Adcyap1r1
Nrg3 -> Egfr
Npy -> Adra2a
L1cam -> Egfr
L1cam -> Cd9
Hsp90aa1 -> Egfr
Gstp1 -> Egfr
Fgf13 -> Fgfr3
Fgf13 -> Egfr
Edil3 -> Itgb5
Edil3 -> Itgav
Dlk1 -> Notch3
Dlk1 -> Notch2
Dlk1 -> Notch1
Cx3cl1 -> Itgav
Cntn6 -> Notch1
Agrp -> Sdc3
Adam12 -> Sdc4
Tnr -> Itgav_Itgb6
Shh -> Gpc5
Pomc -> Adcyap1r1
Nxph3 -> Nrxn1
Nrg3 -> Egfr
Lama1 -> Sdc4
L1cam -> Egfr
L1cam -> Cd9
Gpc3 -> Cd81
Fgf13 -> Fgfr3
Fgf13 -> Egfr
Edil3 -> Itgb5
Edil3 -> Itgav
Dlk1 -> Notch3
Dlk1 -> Notch2
Dlk1 -> Notch1
App -> Tspan15
App -> Tspan12
App -> Lrp10
Adam12 -> Sdc4
Lxn+ astrocytes
Lxn- astrocytes
Lxn+ astrocytes
Lxn- astrocytes
Target
Lxn+ astrocytes
Lxn- astrocytes
Lxn+ astrocytes
Lxn- astrocytes
Target