

Figure S1

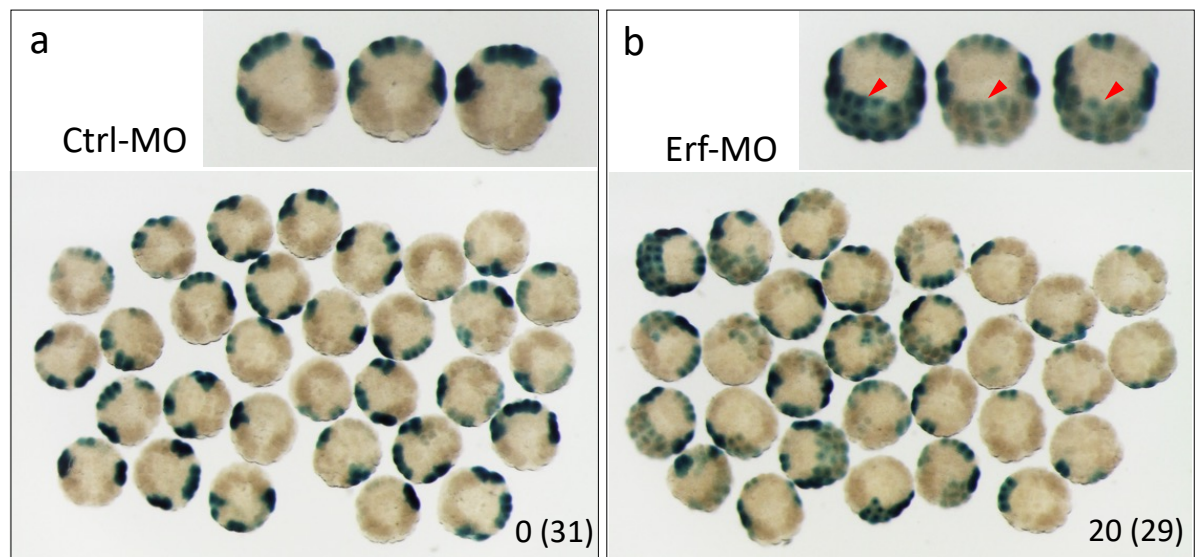


Figure S1: Loss of ectodermal ERF repression (derepression) at ETS binding sites upon *Erf* Morpholino injection: (a) Embryos injected with control morpholino and the *Otx a-element*. (b) Embryos injected with *Erf* Morpholino and the *Otx a-element* displaying ectopic expression in the vegetal domain. Numbers indicate the fraction of samples displaying ectopic expression.

Figure S2

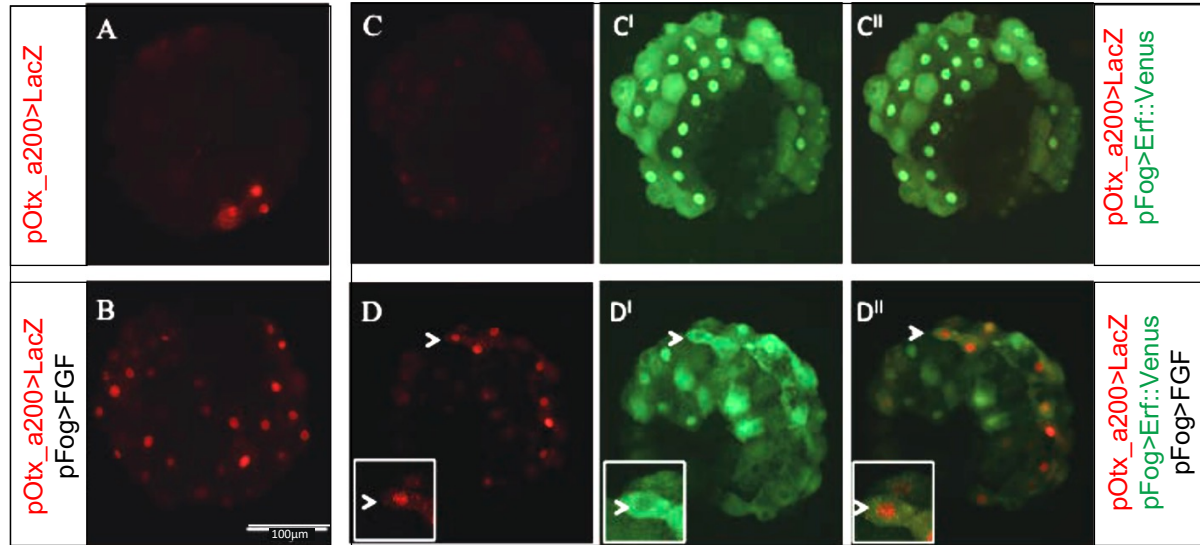


Figure S2: Nuclear export of Erf by FGF signalling correlates with ETS site activation (A) *pOtx-a200>LacZ* expression in b6.5 cells (red) co-electroporated with (B) *pFog>FGF9/16/20* or (C, C', C'') *pFog>Erf::Venus* (green) or (D, D', D'') *pFog>FGF9/16/20* and *pFog>Erf::Venus*. C'' and D'' are overlays of C and C' or D and D', respectively. Insets (white boxes) in D, D' and D'' represent enlarged regions pointing to cytoplasmic Erf in cells expressing the *pOtx-a-element* (nuclear LacZ). Embryo counts are represented in Table S4.

Figure S3

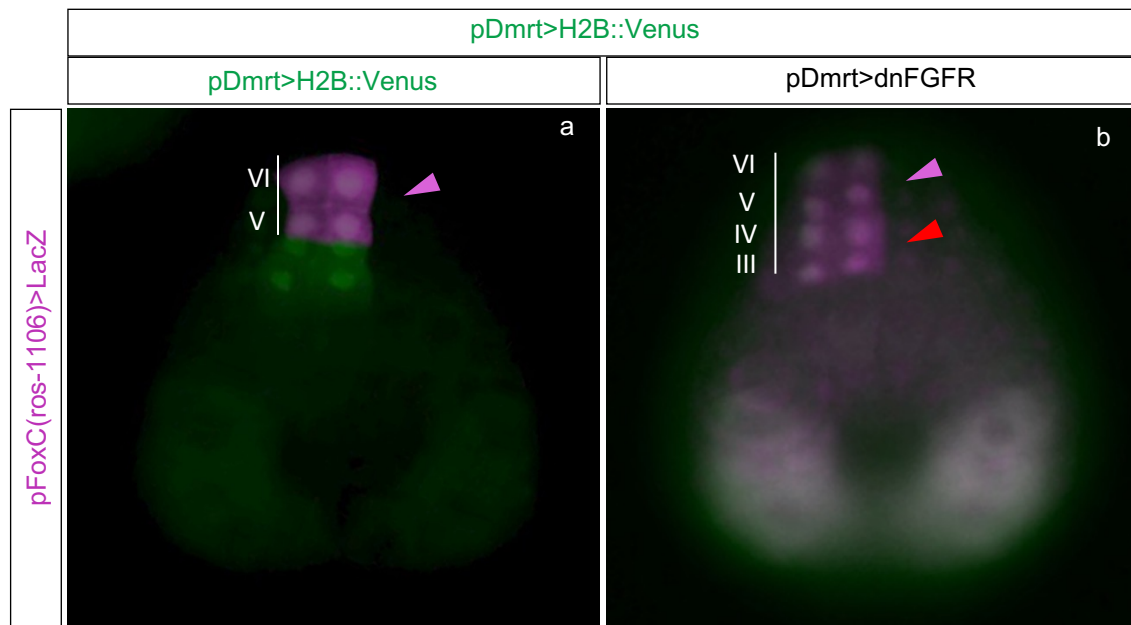


Figure S3: **Derepression of *FoxC* by blocking FGF signalling in the NP:** (a) Control embryo co-electroporated with *pDmrt>H2B::Venus* and the *FoxC* reporter driving LacZ (magenta). (b) embryo co-electroporated with *pDmrt>H2B::Venus*, *pDmrt>dnFGFR* and the *FoxC* reporter displaying ectopic expression in the posterior NP (brain) cells.

Figure S4

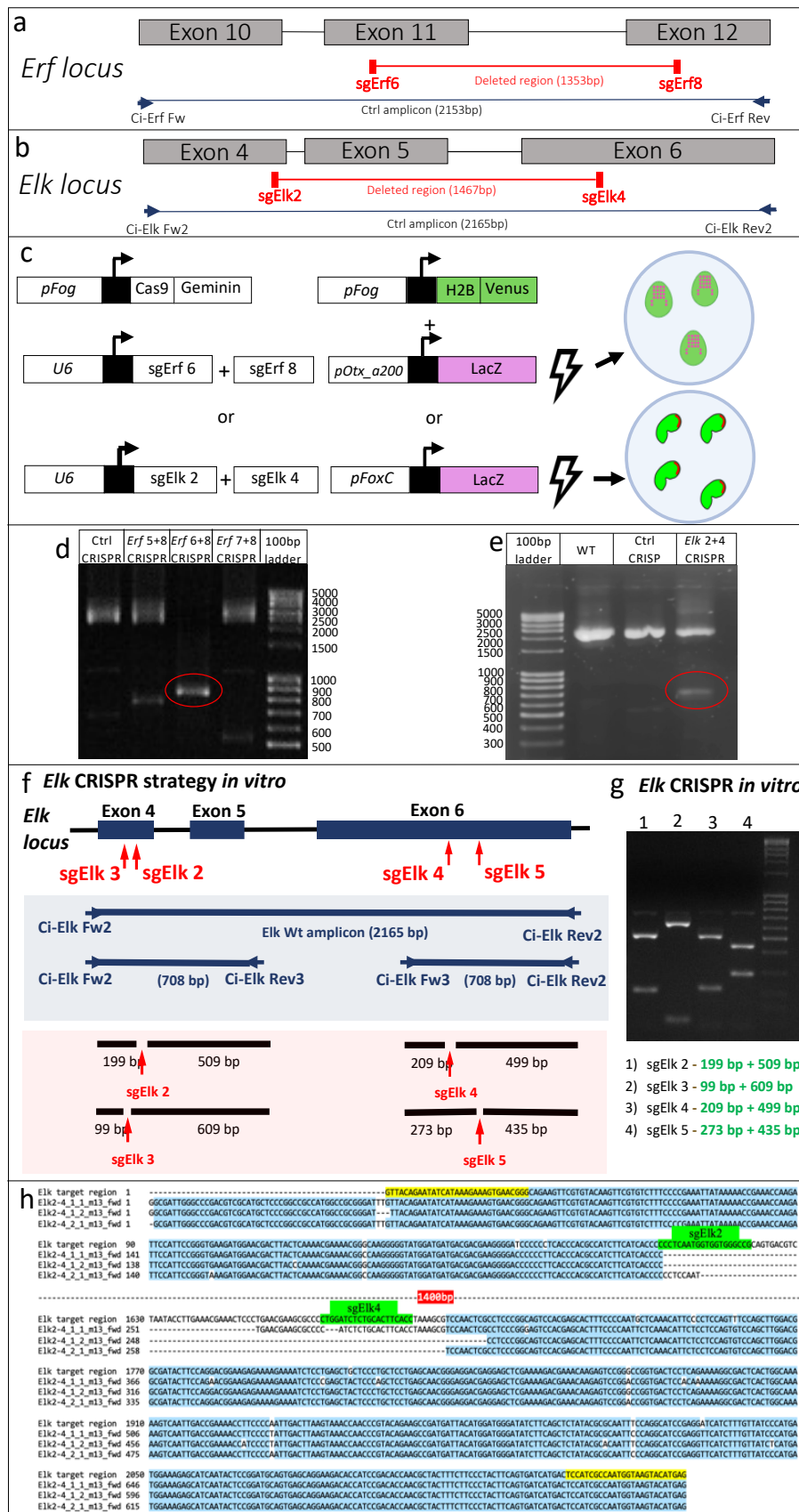


Figure S4: *Erf* and ***Elk*** CRISPR strategy and validation of individual guides by *in vitro* editing and *in vivo* genotyping (a, b) Schematic representation of *Erf* and *Elk* loci, position of sgRNAs and primers used for genotyping. (c) electroporation scheme for introducing *Erf* and *Elk* loss of function constructs. (d, e) PCR amplifications with specific deletions used for phenotype evaluations (circled in red). (f, g) *Elk* CRISPR *in vitro* sgRNA validation (f) placement of sgRNAs relative to *Elk* locus structure. Blue inset: PCR primer positions and PCR product lengths; pink inset: prediction of the fragment length after *in vitro* cleavage of the single guides. (g) Gel electrophoresis upon *in vitro* CRISPR with the guides used in the *in vivo* experiments (plus others not used in this work) and sizes of expected bands (green). (h) Alignment of Sanger sequenced PCR amplicons obtained from gDNA of embryos electroporated with the control or *Elk* sgRNAs. Lines 2 to 4 show three different deletions obtained using two sgRNAs specific for *Elk* (*sgElk2* and *sgElk4*, green). PCR primers are highlighted in yellow (*Ci-Elk Fw2* / *Ci-Elk Rev2* as in b, f). Red, numbers of deleted nucleotides not shown. Primer and sgRNA sequences are listed in Tab. S3.

Figure S5

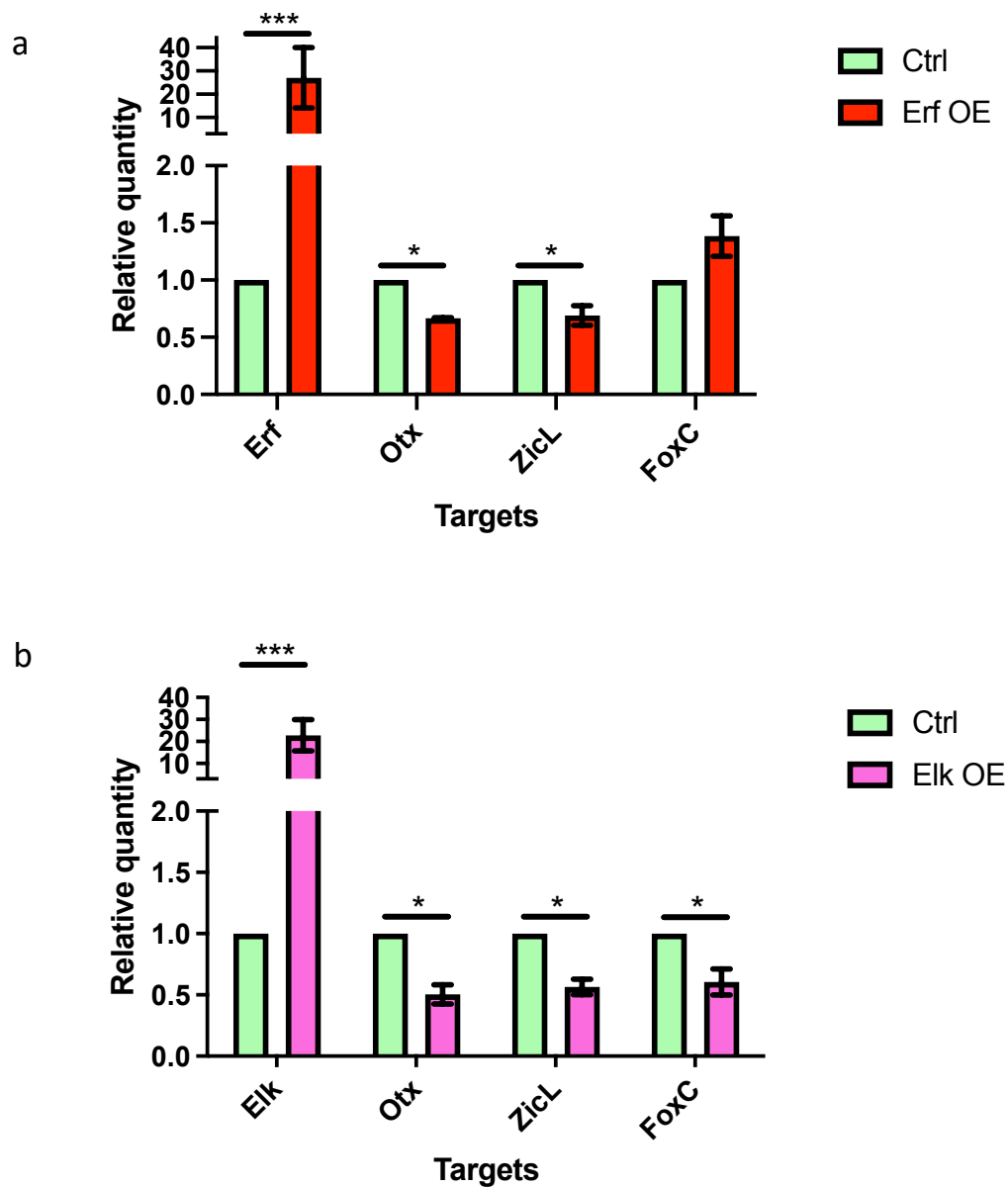


Figure S5: **Relative expression levels (fold change) of target genes after overexpression of *Erf* and *Elk* in the NP measured by qPCR.** (a, b) Levels are compared to the control gene *RPS27A*. Asterisks mark significant differences (***: $p < 0.001$, *: $p < 0.05$). Green indicates levels of the target in control samples, red and magenta indicates levels of the targets after overexpression of *pDmrt* driven *Erf* and *Elk* respectively.

Table S1: Plasmid list and Primers used for In-Fusion cloning

Plasmid	Vector backbone	Primers	Insert	Primers
pFog>H2B::Venus	pFog>H2B::mCherry (Kim et al., 2020)	fogH2BmC Linear Fw: GCGGCCGCAACCATGCCACC fogH2BmC Linear Rev: GGCGCGCCTTAATTAATACGTAAGG	H2B::Venus From pFoxC>H2B::Venus (Wagner and Levine, 2012)	H2B Venus IF Fw: TAGCGGCCGCAACCAATGCCAGAGCCAGCGAAG H2B Venus IF Rev: CTCAGCTGGAATCTCTCAGCTGGAATCCGATGAGTG
pFT>H2B::Venus	pFog>H2B::Venus	pFog_H2BVenus Linear Fw: GCGGCCGCAACCAATGCC pFog_H2BVenus Linear Rev: GGCGCGCCTTAATTAATACGTAAGG	pFT From pFT>Elk	pFT IF (H2BV) Fw: TAATTAAGGCGCGCCGACCATGGCAATCATAACGTAC pFT IF (H2BV) Rev: ATTGGTTGCGGCCGCTGCAGCGGTAGAGTTTACTATTATC
pDmrt>H2B::Venus	pFog>H2B::Venus	pFog_H2BVenus Linear Fw: GCGGCCGCAACCAATGCC pFog_H2BVenus Linear Rev: GGCGCGCCTTAATTAATACGTAAGG	pDmrt from pENTR-R3-pDMRT-R5 (Roure et al., 2007)	pDmrt IF (H2BV) Fw: TAATTAAGGCGCGCCTCAGAACGAGGCGCTACATG pDmrt IF (H2BV) Rev: ATTGGTTGCGGCCGCTCACTGTTCTAAGCAAGGTATCAAG
pFog>Erf::Venus	pSP72BSPE-R3-ccdB/cmR-R5::RfA-Venus pENTR-L3-pFOG-L5 (Roure et al., 2007) triple LR reaction with pENTR-R1-Erf-mutSTOP-R2		Clone cien99396 (VES85_B20) Gateway full ORF clone collection (Gilchrist et al., 2015)	attB1_fw_ErfA: GGGGACAAGTTTGTACAAAAAGCAGGCTCAGAAAAA TG-CACTGCTCCTATGTGG attB2_rev_ErfA-mutSTOP: GGGGACCACTTTGTACAAGAAAGCTGGGTTTAAATCCC AAAGCTGCTCTTC Generating pENTR-R1-Erf-mutSTOP-R2
pFog>Elk::Venus	pFog>Erf::Venus	pFog_X_Venus IF Fw: ACCCAGCTTTCTGTACAAAGTGG pFog_X_Venus IF Rev: TTTTCTGAGCCTGCTTTTTGTAC	Ci-Elk From pFT>Elk	Ci-Elk IF Fw: CAGGCTCAGAAAAAATGATGACATTGAAATCGACACAG Ci-Elk IF Rev: ACAAGAAAGCTGGGTACGATGAAGTTAGTGTCTGACG
pFT>Erf::Venus	pFog>Erf::Venus	pFog_ErfVenus Linear IF Fw: ACCCAACTTTTGTACAAAGTGG pFog_ErfVenus Linear IF Rev: AGCCTACTTTATTATACAAACTTGT	pFT From pFT>Elk	pFT (to ERV) IF Fw: ATAATAAAGTAGGCTGACCATGGCAATCATAACGTAC pFT (to ERV) IF Rev: TATACAAAAGTTGGGTGCAGCGGTAGAGTTTACTATTATC
pFT>Elk::Venus	pFog>Elk::Venus	pFog_ErfVenus Linear IF Fw: ACCCAACTTTTGTACAAAGTGG pFog_ErfVenus Linear IF Rev: AGCCTACTTTATTATACAAACTTGT	pFT From pFT>Elk	pFT (to ERV) IF Fw: ATAATAAAGTAGGCTGACCATGGCAATCATAACGTAC pFT (to ERV) IF Rev: TATACAAAAGTTGGGTGCAGCGGTAGAGTTTACTATTATC
pDmrt>Erf::Venus	pFog>Erf::Venus	pFog_ErfVenus Linear IF Fw: ACCCAACTTTTGTACAAAGTGG pFog_ErfVenus Linear IF Rev: AGCCTACTTTATTATACAAACTTGT	pDmrt from pENTR-R3-pDMRT-R5 (Roure et al., 2007)	pDmrt IF Fw: ATAATAAAGTAGGCTCAGAACGAGGCGCTACATG pDmrt IF Rev: ATACAAAAGTTGGGTCACTGTTCTAAGCAAGGTATCAAG
pDmrt>Elk::Venus	pDmrt>Erf::Venus	pFog_ErfVenus Linear IF Fw: ACCCAACTTTTGTACAAAGTGG pFog_ErfVenus Linear IF Rev: AGCCTACTTTATTATACAAACTTGT	Ci-Elk From pFT>Elk	Ci-Elk IF Fw: CAGGCTCAGAAAAAATGATGACATTGAAATCGACACAG Ci-Elk IF Rev: ACAAGAAAGCTGGGTACGATGAAGTTAGTGTCTGACG
pFog>Ets::VP16	pFog>RfA		Ets:VP16 from ptypr1a>Ets:VP16 (Squarzone et al., 2011)	attB1_fw_EtsDBD GGGGACAAGTTTGTACAAAAAGCAGGCTCAGAAAAA TGCTTACTGACACCTTTGAAGC attB2_rev_VP16 GGGGACCACTTTGTACAAGAAAGCTGGGTTTCTACCCAC CGTACTCGTCAATCC Cloned first into pDONR221, then by LR reaction into pFOG-L>RfA
pFog>Ets::WRPW	pFog>RfA		Ets:WRPW from ptypr1a>Ets:WRPW (Squarzone et al., 2011)	attB1_fw_EtsDBD GGGGACAAGTTTGTACAAAAAGCAGGCTCAGAAAAA TGCTTACTGACACCTTTGAAGC attB2_rev_WRPW GGGGACCACTTTGTACAAGAAAGCTGGGTTTATTACCA GGGCCGCCAGGCTGC Cloned first into pDONR221, then by LR reaction into pFOG-L>RfA
pFog>ERF	pFog>RfA		Clone cien99396 (VES85_B20) Gateway full ORF clone collection	

			(Gilchrist et al., 2015)	
pFog> ELK	pFog>RfA		Clone cien77685 (VES82_K12) Gateway full ORF clone collection (Gilchrist et al., 2015)	
pFT> RfA	pFT-BSE		Genomic DNA Ciona intestinalis	PN-pFT: AAAACTGCAGACCATGGCAATCATAACGTAC 3'B-pFT: CGCGGATCCTGCAGCGGTAGAGTTTACTATTATC cloned into pSP72-1.27 (Corbo et al., 1997) by BamHI/PstI to generate pFT>LacZ, pFT cut out and cloned into pSP-BSE by SphI/BamHI pSP-BSE generated from pSP72-1.27, replacing LacZ by a BamHI-SwaI-EcoRV linker, then RfA blunt inserted into SwaI site of pFT-BSE
pFT> Ets::VP16	pFT>RfA		VP16 from ptyr1a>Ets:VP16 (Squarzoni et al., 2011)	attB1_fw_EtsDBD: GGGGACAAGTTTGTACAAAAAGCAGGCTCAGAAAAA TGCCTATACTGACACCTTTGAAGC attB2_rev_VP16: GGGGACCACTTTGTACAAGAAAGCTGGTTCTACCCAC CGTACTCGTCAATTCC Cloned first into pDONR221, then by LR reaction into pFT>RfA
pFT> Ets::WRPW	pFT>RfA		Ets:WRPW from ptyr1a>Ets:WRPW (Squarzoni et al., 2011)	attB1_fw_EtsDBD: GGGGACAAGTTTGTACAAAAAGCAGGCTCAGAAAAA TGCCTATACTGACACCTTTGAAGC attB2_rev_WRPW: GGGGACCACTTTGTACAAGAAAGCTGGTTTTATTACCA GGGCCGCCAGGGCTGC Cloned first into pDONR221, then by LR reaction into pFT>RfA
pDmrt>Ets::VP16	pFog>Ets::VP16	pFogETSvp16 Linear Fw: ATGGATCCATTAAATGATATCACA pFogETSvp16 Linear Rev: CTGCAGGCATGCAAGCTTCA	pDmrt from pENTR-R3-pDMRT-R5 (Roure et al., 2007)	pDmrt (toVP16) IF Fw: CTTGCATGCCTGCAGTCAGAACGAGGCGCTACATG pDmrt (toVP16) IF Rev: TTAAATGGATCCATTCACTGTTCTAAGCAAGGTATCAAG
pDmrt>Ets::WRPW	pFog>Ets::WRPW	pFogETSvp16 Linear Fw: ATGGATCCATTAAATGATATCACA pFogETSvp16 Linear Rev: CTGCAGGCATGCAAGCTTCA	pDmrt from pENTR-R3-pDMRT-R5 (Roure et al., 2007)	pDmrt (toVP16) IF Fw: CTTGCATGCCTGCAGTCAGAACGAGGCGCTACATG pDmrt (toVP16) IF Rev: TTAAATGGATCCATTCACTGTTCTAAGCAAGGTATCAAG
pOtx_a200>LacZ	pOtx-a-bpfog> NLSLacZ (Roure et al., 2007)			
pZicL>LacZ	(Gainous et al., 2015)			
pFoxC(ros-1106)>LacZ	pFoxD>LacZ	FW_ATG_LacZ_IVA_newALE: AAAAATGACTGCTCCAAAGAAGAAGCGT AAG Rv_XhoI_Sp6_LacZ_IVA_newALE: CTCGAGTTCTATAGTGTACCTAAATCGT ATG	gDNA	pFoxC (Ros-1106)LacZ Fw: ACTATAGAACTCGAGTTAATTGTTTCAAATCTATTTG pFoxC (Ros-1106)LacZ Rev: GGAGCAGTCATTTTTATAAAGAATGAAACCAAGG
pFog>Cas9::Geminin	Mesp1>nls:Cas9: nls:Geminin (Song et al., 2022)	cas9Geminin linear fw: GCGGCCGCAACCAACCATGG cas9Geminin linear Rev: GGCGCGCCTTAATTAATACGTAAGG	pFog from pFog>Cas9 (Stolfi et al., 2014)	Fog IF fw (Geminin): TAATTAAGGCGCGCCGCAACTATTGTAACACCACAC Fog IF Rev (Geminin): GTTGTTGCGGCGCTATGTGTATTTTTGTATAGACC

Table S2: Electroporation mixes

Figure	Plasmids	Amount	Figure	Plasmids	Amount
Fig. 1a	pFog>H2B::Venus pOtx_a200>LacZ	25µg 50µg	Fig. 4d	pDmrt>Elk::Venus pFoxC>LacZ	25µg 50µg
Fig. 1b	pFog>H2B::Venus pFog>Ets::WRPW pOtx_a200>LacZ	25µg 25µg 50µg	Fig. 4f	pDmrt>H2B::Venus pFoxC>LacZ	25µg 50µg
Fig. 1c	pFog>Erf::Venus pOtx_a200>LacZ	25µg 50µg	Fig. 4g	pDmrt>Erf::Venus pDmrt>Ets::WRPW pFoxC>LacZ	25µg 25µg 50µg
Fig. 1d	pFog>Elk::Venus pOtx_a200>LacZ	25µg 50µg	Fig. 4h	pDmrt>Erf::Venus pFoxC>LacZ	25µg 50µg
Fig. 2a	pFog>H2B::Venus pFog>Cas9::Geminin U6>Ctrl pOtx_a200>LacZ	25µg 20µg 40µg 40µg	Fig. 4j	pDmrt>Elk::Venus pFoxC>LacZ	25µg 50µg
Fig. 2b	pFog>H2B::Venus pFog>Cas9::Geminin U6>Erf6 U6>Erf8 pOtx_a200>LacZ	25µg 20µg 20µg 20µg 40µg	Fig. 5a	pFog>H2B::Venus pOtx_a200>LacZ	25µg 50µg
Fig. 2c	pFog>H2B::Venus pFog>Cas9::Geminin U6>Ctrl pFoxC>LacZ	25µg 30µg 30µg 40µg	Fig. 5b	pFog>H2B::Venus pFog>Ets::VP16 pOtx_a200>LacZ	25µg 25µg 50µg
Fig. 2d	pFog>H2B::Venus pFog>Cas9::Geminin U6>Elk2 U6>Elk4 pFoxC>LacZ	25µg 30µg 15µg 15µg 40µg	Fig. 5c	pFT>H2B::Venus pOtx_a200>LacZ	25µg 50µg
Fig. 3a	pFT>H2B::Venus pOtx_a200>LacZ	25µg 50µg	Fig. 5d	pFT>H2B::Venus pFT>Ets::VP16 pOtx_a200>LacZ	25µg 25µg 50µg
Fig. 3b	pFT>H2B::Venus pFT>Ets::WRPW pOtx_a200>LacZ	25µg 25µg 50µg	Fig. 5e	pDmrt>H2B::Venus pOtx_a200>LacZ	25µg 50µg
Fig. 3c	pFT>Erf::Venus pOtx_a200>LacZ	25µg 50µg	Fig. 5f	pDmrt>H2B::Venus pDmrt>Ets::Vp16 pOtx_a200>LacZ	25µg 25µg 50µg
Fig. 3d	pFT>Elk::Venus pOtx_a200>LacZ	25µg 50µg	Fig. 5g	pDmrt>H2B::Venus pZicL>LacZ	25µg 50µg
Fig. 3f	pDmrt>H2B::Venus pOtx_a200>LacZ	25µg 50µg	Fig. 5h	pDmrt>H2B::Venus pDmrt>Ets::VP16 pZicL>LacZ	25µg 25µg 50µg
Fig. 3g	pDmrt>H2B::Venus pDmrt>Ets::WRPW pOtx_a200>LacZ	25µg 25µg 50µg	Fig. 5i	pDmrt>H2B::Venus pFoxC>LacZ	25µg 50µg
Fig. 3h	pDmrt>Erf::Venus pOtx_a200>LacZ	25µg 50µg	Fig. 5j	pDmrt>H2B::Venus pDmrt>Ets::VP16 pFoxC>LacZ	25µg 25µg 50µg
Fig. 3j	pDmrt>Elk::Venus pOtx_a200>LacZ	25µg 50µg	Fig. S2a	pFog>Erf::Venus pOtx_a200>LacZ	25µg 25µg
Fig. 4a	pDmrt>H2B::Venus pFoxC>LacZ	25µg 50µg	Fig. S2b	pFog>Erf::Venus pOtx_a200>LacZ pfog>FGF9/16/20	25µg 25µg 12,5µg
Fig. 4b	pDmrt>H2B::Venus pDmrt>Ets::WRPW pFoxC>LacZ	25µg 25µg 50µg	Fig. S3a	pDmrt>H2B::Venus pFoxC>LacZ	25µg 50µg
Fig. 4c	pDmrt>Erf::Venus pFoxC>LacZ	25µg 50µg	Fig. S3b	pDmrt>H2B::Venus pFoxC>LacZ pDmrt>dnFGFR	25µg 50µg 25µg

Table S3: Primer and sgRNA sequences

Primer/sgRNA name	Sequence
Ci-Elk Fw2	GTTACAGAATATCATAAAGAAAGTGAACGGG
Ci-Elk Rev2	ACCATACCTGCTTGTAAGTATCG
Ci-Elk Fw3	GCTCCAACGCATTTCCTTTCG
Ci-Elk Rev3	CTCATGTACTTACCATTGGCGATGGA
qPCR RPS27A Fw	CCTTACGGGCAAAACCATCA
qPCR RPS27A Rev	CCTTCCTTATCCTGAATCTTTGCT
qPCR ERF Fw	CACAAGTTCCAAGTAGTCCACAG
qPCR ERF Rev	GCTGGGTACGTAGCCAATG
qPCR ELK Fw	CCCATTACCAAGAGTGCTGG
qPCR ELK Rev	CCTCTTCGGAATTATGGAGCTTG
qPCR Otx Fw	CACCACCAGTATACAGTTCGTCTAG
qPCR Otx Rev	GGACTCTGGAAGGTTGATCTTTAG
qPCR Zicl Fw	AGTTCACCTACGTAAGCACATACG
qPCR Zicl Rev	GGAGTTTTGTTCTCGAGCTACATC
qPCR FoxC Fw	CAAAATCCCGAGGGACGAC
qPCR FoxC Rev	CATCTTGTTTCCGCTTAAACCTC
sgELK2	CGGCCCCACCACCATTGAGGG
sgELK4	GGTGAAGTGCAGAGATCCAG

Table S4: Embryo counts for FGF triggered ERF::Venus nuclear to cytoplasmic shuttling (for Fig. S2)

	a6.5 & b6.5	Repression	Ectopic	Total n°
a-element	95	0	0	95
a-element+Erff::Venus	26	46	0	72
a-element+FGF	24	0	54	78
a-element+FGF+Erff::Venus	74	13	17	104

Plasmid sequences

pFog>H2B::Venus

GCAACTATTGTAACACCACACGGGGGCGCAGTAGAGCCAGAATCTTAGTAAATGCGGTTTGATTGTAAAGTTTTAACAATCTCTCGCTTTGTATATTCTAGAATGGGGAAAGATGGGACCCTTAAGCACTCATTGCCCAATATTTCCAAACCCAAAATCTACGATGGTTTTGTGTGGTACCACGAATTAGTACTATCATATACACTTCAAAAGAAATATATTAACCATACGAGAAGTAATTTATCTATTCGCACAACAGGTGTAACCTTTGAAATTCGAACACAGGCGAGCTAGTTTTATGACACGTAAACTTTATATATTTCTTTTCTAATTTAAGGAATATTGACCACTGCCCAATTTTCTTGTTTTAATATCCCAGTTTTTAAAATGGCCTGAAATATTTACAGCTTATTTTATTAATACGATACTGGATTGATGATTCAAATTAACAAACTACCAAAAAATGTTGACAGTTTTAATATGATTTACCGAGCACCACGTGTAAACAGCATCATACAAATTTAATTGATTTTGTATTACTTACTTTATAATTTAAACATACGGTATTTAGTAAACAAAGAACATTCAAAGAATTAGAAAACCGTATTCCCATGACTTTCATAGACCGTTGTTGATTGTTTAAACATGATCATAATATGTAGGTATTATATGTGCCAAAGGTGTCCCGTTTTCCCCACCCATACTATATATATTATAAAAAAATGCGCTTATAAAAAAACTATACCCTGCATGTATTTATAGATTTGTTAAACGTATGATCTCGTGTTATGATCTATCCGTATAGTGGACCAGGAATCTTTGGGTTGTGCATATTTAACTGAGAAATCGACAAGCAATTAACGCGGCAGTATACGACATGAACAATATAATTGGCGCATTATAATTAGATTGTATACCACGCACTACCTAAAAAGTTAAGCTATAACTGACGTCAGGTATTATTTATTGGTATCCGGCAACACTAATAAATGAAATTTGTCAAAATGTAAGCCCTCGTATCTATTTAAATTTTGACGCTAAATAATCCATTATGCAGTATAATACCAACATACAAAAATGTTTCAGTTTGATCACTTTATTATGCATCACGTTTTTGGGATAAAATACACATCAGGATTTAACAAAAATATGTAAATACAATATGGCGGTATTGCTTTCACCTAAAAGTGTTAACAAATTAAGATGGGAAAAATAAAACAGTAAATATATTCTTTAAATCGAACTTTTGTGTAAATCTTCTATTTTAATAATTTATTCATGTTTAAACGATGTTTGTTCGGCTCATGCTGCTCGTTAGGTATAACTTCACTCGGGACATTTTAGTATCGAGTTGCTCAAAATTGTTAGGGTTGTCAACTGAATAGCGATGTTTTCGATTGAGTTAATATTTCTATACATGATGGCATCAGCTAGTAAGATAGAAACAACCTTGTTATTACTCGTGCTGTAATAATATAATTCATGAAAAACAAACATGGTCTTATCAAATCTATCCGAAGACAAACATACGGCTGATAGAATTCAGTCAGCGCGGTTTGGGCGACATCACTCAGAGCTCTAGCTCTTATCTTGCTTATCGAGCAAGCGATAAAACAAGCAGTAACGAGAAAAACAAGAGAAAGAAGGCTAGCTTCCTGGAGAAGACCAAGATAAAGTATCTCAAAATTCAGGAAACGGTCCAAGACCGAAGCTCCAAAGCTCTTGTGTTCAAGTTAACTCTGATAGTGAATAAGCTTCGTGTATTGTACCGACCCATTGTCAATCATGCAAACTTGATATTATATTGACAAGAGAAGAAGGCAGTTTAAATTTAACTCTAAAGTAGAGAGACATTAATCTCAGCTGACAAGGCAGGTGGTCACAGTAAGTTCAATTTAAATAGTTGGCCAACAACAGCTTTTCCAAGAAAGTATTTTGTTTTAGGTCTATACAAAAATAACACACATAGCGGCCGCAACCAATGCCAGAGCCAGCGAAGTCTGCTCCCGCCCCGAAAAAGGGCTCCAAGAAGGCGGTGACTAAGGCGCAGAAGAAAGGCGGCAAGAAGCGCAAGCGCAGCCGCAAGGAGAGCTATTCCATCTATGTGTACAAGGTTCTGAAGCAGGTCCACCCTGACACCGGCATTTCTGTTCCAAGGCCATGGGCATCATGAATTCGTTTGTGAACGACATTTTCGAGCGCATCGCAGGTGAGGCTTCCCGCCTGGCGCATTACAACAAGCGCTCGACCATCACCTCCAGGGAGATCCAGACGGCCGTGCGCCTGCTGCTGCCTGGGGAGTTGGCCAAGCACGCCGTGTCGAGGGTACTAAGGCCATCAACAAGTACACCAGCGCTAAGAACCCAGCTTTCTTGTAACAAGTGGTGATAAACTTAGATATGGTGAGCAAGGGCGAGGAGCTGTTACACGGGGTGGTGCCCATCCTGGTTCGAGCTGGACGGCGACGTAAACGGCCAAGTTTCAGCGTGTCGGGCGAGGGCGAGGGCGATGCCACCTACGGCAAGCTGACCCTGAAGCTGATCTGCACCACCGGCAAGCTGCCCGTGCCCTGGCCACCCCTCGTGACCACCCTGGGCTACGGCCTGCGAGTGCTTCGCCCCGTACCCCCGACCACATGAAGCAGCACGACTTCTTCAAGTCCGCCATGCCCGAAGGCTACGTCCAGGAGCGCACCATCTTCTTCAAGGACGACGGCAACTACAAGACCCGCGCCGAGGTGAAGTTTCGAGGGCGACACCCTGGTGAACCGCATCGAGCTGAAGGGCATCGACTTCAAGGAGGACGGCAACATCCTGGGGCACAAGCTGGAGTACAACCTACAACAGCCACAACGTCTATATCACCGCCGACAAGCAGAAAGAACGGCATCAAGGCCAACTTCAAGATCCGCCACAACATCGAGGACGGCGGGCGTGTCAGCTCGCCGACCACTACCAGCAGAACACCCCCATCGGCGACGGCCCCGTGCTGCTGCCCGACAACCACTACCTGAGCTACCAGTCCGCCCTGAGCAAAGACCCCAACGAGAAGCGCGATCACATGGTCTGCTGGAGTTCGTGACCGCCGCCGGGATCACTCATCGGAATTCAGCTGA

pFT>H2B::Venus

GACCATGGCAATCATAACGTACAACCTGATCTTGTTTTCTACATTGCTATTGCTTATATTGTAATTTGGAAA
CATGCCACAACGTCGTTCTCGTTTAGACAAGGGTTTTGTTTATGTGGAACAATGAAAACGTGGGCGAATC
TTCACGGCGGAATAAACGAGAACAAGATAATCTATCTTTACAGCGACGAATAATGGTTGTCATTGTGACG
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TTTGGTCTCATTTTTCAGTCGCCAACTTCACGTGTGATGTGCCACCATGACAGTTAATGTGTTCAACATGT
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