

FIGURE LEGENDS

Supplementary figure 1. Cryptic splice variant of *lin9* transcript evoked by MO-E1. (A) Schematic representation of the cryptic splice product (red). Artificial acceptor and donor sites of Intron 1 (green) are indicated. (B) Sequence of *lin9* pre-mRNA Intron 1. Uppercase letters indicate the information that is retained in the cryptic variant.

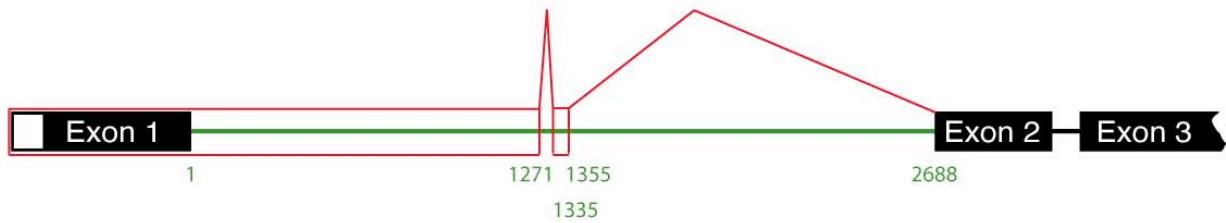
Supplementary figure 2. Increase of apoptotic and mitotic cell numbers in the optic tectum of LIN9 morphant embryos. Confocal images were taken of Hoechst stained embryos 30 hpf as indicated (dorsal view).

Supplementary figure 3. Summary of genes that were deregulated ≥ 1.6 fold in E1 compared to E1mis (control) morphants. (A) Downregulated genes. (B) Upregulated genes.

Supplementary figure 4. Expression analysis of the apoptosis-related genes *tnfb* and *bax* in *lin9* morphants. RT-qPCR analysis 24 hpf revealed that transcript levels of the p53 target gene *bax* are unaltered, whereas *tnfb* is upregulated upon loss of *lin9*.

Supplementary figure 1

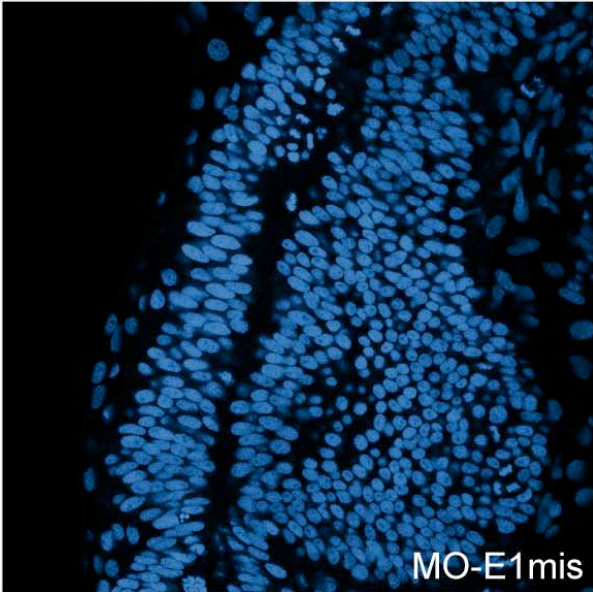
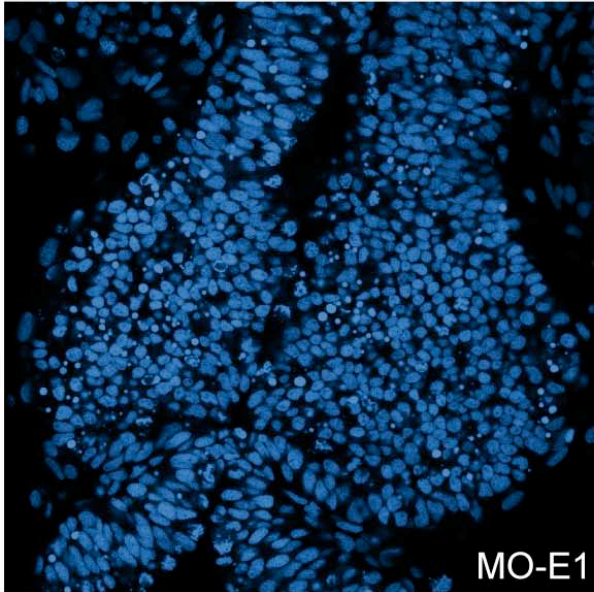
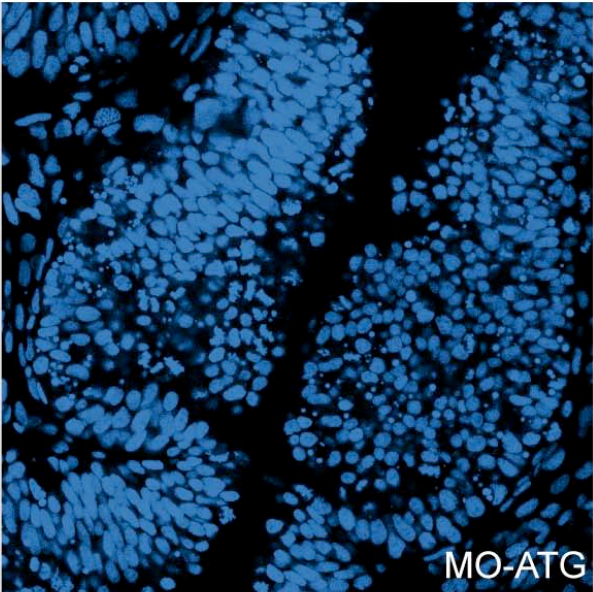
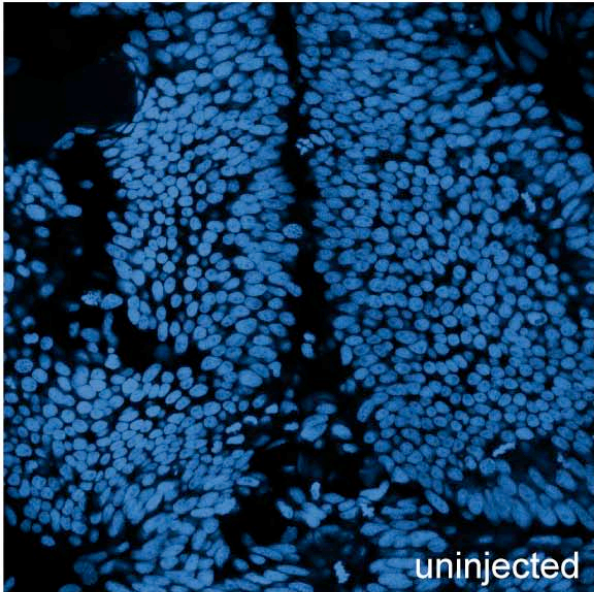
A



B

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1 GTGAGTAATAAACTAACTCCTCGCTAAACCTTGAAAAATCCCCCTGAGTGTTTGTGCGGTTTAAACGTTTCATAAGGCGTGCTATTGCGCGTACAT
101 TTCAGGTGCTTTTCATTGTTTGTACTGGTGTAAAATAGACGCAAAAGTATTAGCGCTGAGGCTAACAGCTAACAGTGTAGCTTTCAAAGCCTACTACTA
201 TAAATAAATATCGCACCTGAAGAGTTTTTCGCCTTAAAGTTTCGTATGGTGCTTTGTTTATAATCAAATAATTTAATTACTGGTTGCGGTTTCGCA
301 GTGTTTACTATGAAAAGGGTTAACTTTTATACATTTACAGGGTCTAACTCGATGACAGCTGCTGGGTTTGTGTTCTTGTGAGTGTGAGTTTATT
401 TGTGTACTAAAACACTGTCGGTATGATAAACACATACTTTAATATGCTGAAACACTCTTCAGGTGTGAAAATGCGCTCTTGTATGATGACGACTTGT
501 GTCTGGATAATTCTCATTATCACAATAATTCACAGTGATTTTTTTCTTCGGTCTTACCGAAAGCTTTGTTTTGATTGATTAATAGGGATAATTGCGT
601 AATCCGTGCTGTTATCTTGCTTATAATTACTTTTAAATTTGAGCAGCTTATAATTGCAGAAAGATTATTTATTTCTAGCTTTGCTTTATT
701 TAAAGTATCAAAAATAAAAACATATTACAGCTTTTTTCACTGAACAATAAAACGTCCTGCTAAATTTAAGCATAAAAAAGGCTATCATACTTTTAA
801 CAAGGATTATCAGAAGTAACCACTAAAATCTTATTGGTGAACAATAGTTTATCTCATCAGGCTTAGATCAAGAATCATATGATGTCATTATTCAGAA
901 CAATTAAGAATGGCTGTGACGCTCTTTAAATACTAATTTTCATTTTAAATCTTTATATTTTAGTTTTATTTTAAACACACATTGTTGATCAA
1001 CAGAAGGTTCAAACATTCTACAATGAAATGAAATTAAGTTAATAGCACATCATTTTATGAGTACAGGTGAGAATGTTGTGTTAAATTAATAAAATGT
1101 AAAAAGGGCATTAAATAAAAAAGGCTATTTTTCAGCTGCAACCCATCACTGGGAAGCACCCATACACACTCATTACACACATACACTACGAACAATTC
1201 AAGGTACCCCAATTCACCTATAGCGCATGCTTCGGAGTGTAGGGTAAAACGGAGCACCCGGAGGAAACccacggaactggggaacatgcaact
1301 ccacacagaatgccaactgatccagccaaggctCGAACCGCAACCTTTTGTGtgaggcctatctttcatttaaatctttatattgtaactttta
1401 atttcaaacacatctttttgtcaacagaagtttaaaataatctaaataaataaagtttgatagcacataatataagactcaggtcaga
1501 atgtagtatgatatttaattagaacttaaaatgcctcttaagtagaccattttcaaccatattttgatattttacttaagttatttaagcat
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2101 gaataaagtggaattgaaacaatttaataaataaaagcaataaaagcatcaaggagatttaaaaaatagataggagcaattgcaaatgcttgatcac
2201 ctctgtttgttaagcatgtttatgaagttgatctatcaactcactaagttaaaaataaaaacattcaagctttcctattcttgggttcagctgaaa
2301 gggcatccagtttgtaaaaacatagccggaatagttggcggttcattccgctgtggcgacccctgataaataagggagtaaacgaaagaaaataataa
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2501 ttggggctgaactattgtaataaccatgcactaaaaccctttaatctgctgataatcggactttactcagttgcatattgatattcaagattt
2601 gttttgtttggacttctaatcatatgttgcttttgaactgtaagtattgtaataatcaaacctttgttctcttcgcttcag
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Supplementary figure 2



Supplementary figure 3

A

zgc:56161
 LOC402879
 zgc:136263
 zgc:158222
 TC356740
 ENSDART00000105631
 rdbp
 lin9
 im:7137135
 TC306331
 si:dkkey-94n12.2
 LOC567658
 sass6
 kifc1
 tuba1
 zgc:92153
 cdc20
 LOC567446
 B1326267
 hmnr
 ccn1
 zgc:92020
 ENSDART00000021089
 cyp51
 zgc:158222
 LOC561143
 tacc3
 zgc:92339
 wu:fj40d12
 kif11
 BC150401
 top2a
 zgc:91796
 zgc:55664
 EH513764
 gpsm2
 zgc:123190
 epd
 si:dkkey-85n7.5
 ik.tdsbuc_2d11
 TC363049
 zgc:153154
 ENSDART00000085742
 cdc2
 zgc:55664
 LOC799087
 LOC562517
 exosc4
 ccng1
 im:7144435
 TC357954
 zgc:123049
 pflfb3
 zgc:110002
 LOC796178
 zgc:92218
 TC324722
 TC331971
 CO350290
 kpna2
 zgc:101826
 zgc:153062
 tuba8l
 cyp1a
 ccng1
 LOC572136
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 ptgs2b
 TC357170
 cdc14a
 TC362508
 si:busm1-234g15.1
 si:dkkey-85n7.5
 np
 rock2a
 zgc:92434
 AA566793
 zgc:113277
 LOC573469
 zgc:92420
 gngt2
 TC319053
 fabp1a
 TC353933
 bscv
 CK029523
 sfard10
 kif23
 zgc:77001
 gpsm2
 TC341224
 rcv1
 zgc:162935
 TC306740
 CT659012
 zgc:136896
 LOC568219
 hsd3b1
 zgc:153382
 BC091922
 ENSDART00000052992
 CN018533
 zgc:152925
 slc25a28
 si:dkkey-117h8.4
 jmjdb
 LOC562883
 LOC797617
 zgc:64213

B

TC364829
 BC142784
 TC340632
 CT704749
 tnfb
 plekhf1
 lsm14a
 cyp11a1
 CK028897
 zgc:101886
 DN893839
 zgc:114142
 sass6
 TC344354
 pvalb1
 zgc:56486
 hpx
 zgc:100806
 TC324513
 zgc:64119
 abi1
 zgc:154142
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 slc40a1
 IL-15_3
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 zgc:152945
 cno18
 CT633450
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 LOC564868
 EE707177
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 entpd3
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 anxa13
 zgc:92041
 ENSDART00000097325
 LOC567285
 EH516139
 rtn4a
 TC351142
 zgc:123250
 CT728813
 TC312939
 LOC556837

Supplementary figure 4

