

Figure S1. Generation of *mr* mutant line. (A) Schematic representation of zebrafish Mr protein composed of N-terminal domain (NTD), DBD, LBD and C-terminal domain (CTD). (B) Schematic representation of *nr3c2* exons. The arrow (both in A e B panel) indicates the region where the mutation occurred. (C) Partial alignment of WT and mutant *nr3c2* nucleotide and aminoacidic sequences. The premature stop codon (TAA) is highlighted in red. (D) chromatogram of *mr^{+/+}*, *mr^{+/ia32}* and *mr^{ia32/ia32}* DNA samples sequenced using the *nr3c2* reverse primer listed in Table 1. (E) Genotyping of *nr3c2* mutants with 3% agarose gel. (F) Survival rate of *mr^{+/+}*, *mr^{+/ia32}* and *mr^{ia32/ia32}* animals at 6 dpf (n=80 animals from 3 different breedings between *mr^{+/ia32}* adults) and ad 60 dpf (n=80 animals from 3 different breedings between *mr^{+/ia32}* adults). Statistical analyses were performed with χ^2 test. *p<0.05.

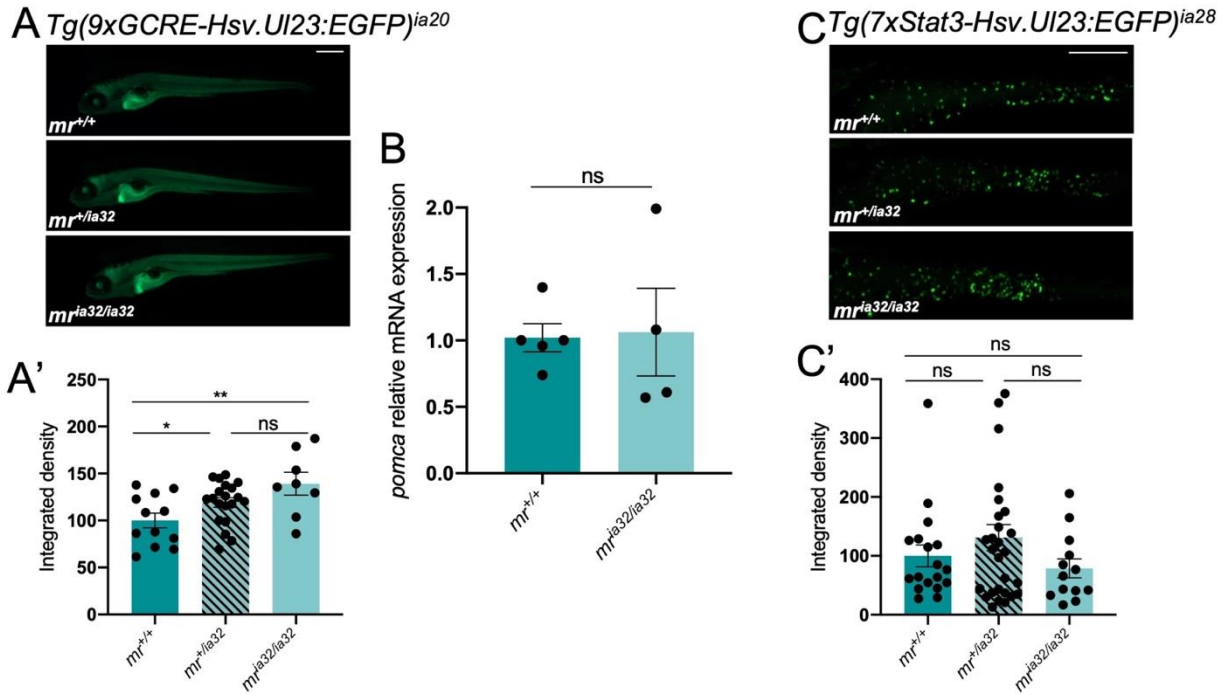


Figure S2. GC/Gr- and Stat3-dependent fluorescence in *mr* mutants. (A) Representative pictures (A) and fluorescence quantification (A') of *mr*^{+/+}, *mr*^{+/ia32} and *mr*^{ia32/ia32} 6-dpf larvae in *Tg(9xGCRE-Hsv.UI23:EGFP)^{ia20}* transgenic background. Scalebar=500μm.(B) RT-qPCR of *pomca* mRNA in *mr*^{+/+} and *mr*^{ia32/ia32} 6-dpf larvae. (C) Representative pictures (C) and fluorescence quantification (C') of *mr*^{+/+}, *mr*^{+/ia32} and *mr*^{ia32/ia32} 6-dpf larvae in *Tg(7xStat3-Hsv.UI23:EGFP)^{ia28}* transgenic background in the intestine. Scalebar=100μm. Statistical analyses were performed with Student *t* test. Mean ± SEM. **p*<0.05; ***p*<0.001; ns = not significant.

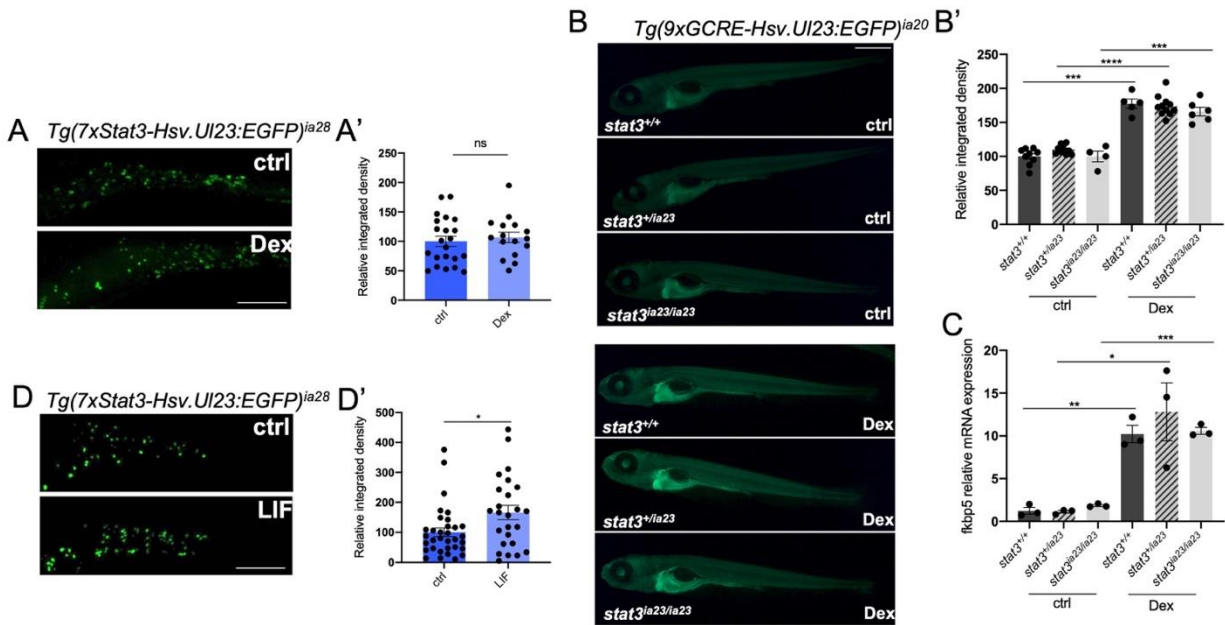


Figure S3. Gr-Stat3 crosstalk with transgenic lines. (A) Representative pictures (A) and fluorescence quantification (A') of *Tg(7xStat3-Hsv.UI23:EGFP)^{ia28}* transgenic larvae intestine treated with Dex for 24hours. Scalebar=100μm.(B) Representative pictures (B) and fluorescence quantification (B') of *stat3*^{+/+}, *stat3*^{+/ia23} and *stat3*^{ia23/ia23} in *Tg(9xGCRE-Hsv.UI23:EGFP)^{ia20}* transgenic background treated with Dex for 24hours. Scalebar=500μm.(C) RT-qPCR analysis of

fkbp5 mRNA in 6-dpf *stat3*^{+/+}, *stat3*^{+/ia23} and *stat3*^{ia23/ia23} treated with Dex for 24 hours. **(D)** Representative pictures **(D)** and fluorescence quantification **(D')** of *Tg(7xStat3-Hsv.Ul23:EGFP)*^{ia28} transgenic larvae intestine treated with 20 μ M LIF for 3 days. Scale bar = 100 μ m. Statistical analyses were performed with Student *t* test. Mean \pm SEM. **p*<0.05; ***p*<0.01; ****p*<0.001.