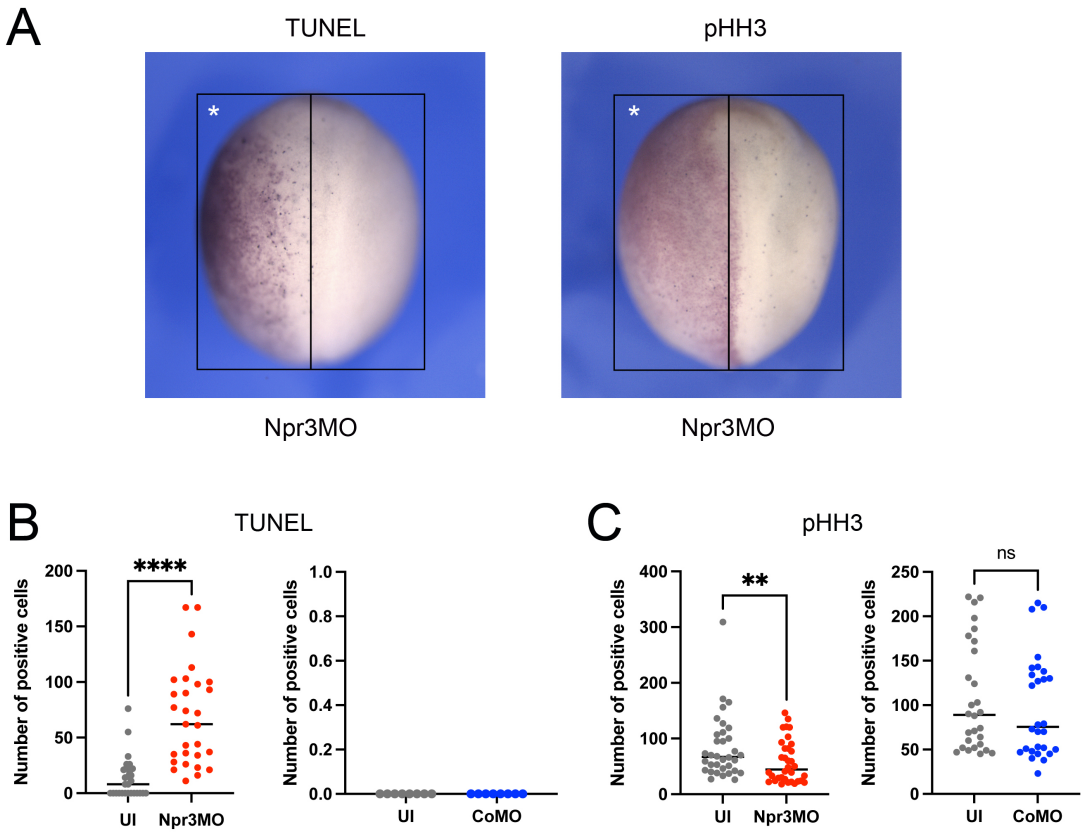
Figure 2-figure supplement 2



Npr3-depletion affects the rate of cell death or proliferation in the dorsal ectoderm. (A) Whole-mount TUNEL (left panel) and pHH3 (right panel) staining of stage 15 embryos injected with Npr3MO on the left side (asterisk). Dorsal views, anterior to top. The black boxes outline the area of the dorsal ectoderm in which TUNEL- and pHH3-positive cells were quantified for each half of the embryo. (B-C) Quantification of the number of TUNEL-positive (B) and pHH3-positive (C) cells in the dorsal ectoderm of CoMO- or Npr3MO-injected embryos comparing injected vs. uninjected sides (UI). Combined data from three biological replicates are shown. Each dot represents one embryo. p-values were calculated using paired t-test, ** $p<0.0095$, **** $p<0.0001$; ns: not significant.

Note: We observed variability in the number of TUNEL-positive cells at the uninjected side. In their original report describing the dynamic of programmed cell death during Xenopus development, Hansey and Gautier (1998) also reported considerable variation in the degree of TUNEL staining and patterns between embryos, including left-right asymmetries. The authors speculated that the presence of a fraction of TUNEL-negative embryos during gastrulation and neurulation might reflect the rapid clearance of dead cells from the embryo.