

CORRECTION

Correction: Somite-Derived Retinoic Acid Regulates Zebrafish Hematopoietic Stem Cell Formation

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Figs <u>5</u> and <u>7</u> appear incorrectly in the published article. Please see the correct Figs <u>5</u> and <u>7</u> and their captions here.



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Fig 5. RA does not regulate the somitic expression of Wnt16-Notch3 signaling pathway components. Shown are representative 17 hpf embryos following *in situ* hybridization analyses (A-J'). Lateral view (A-J) or dorsal view (A'-J') of gene expression is shown with anterior oriented to the left. A'-J' represent different views of the embryos shown in A-J. Compared to DMSO-treated controls (A, A', C, C', E, E', G, G'), DEAB-treated embryos exhibit normal somitic expression levels of *wnt16* (B, B'), and *dlc* (D, D'), mildly increased *dld*

expression (F, F'), and increased *notch3* somitic gene expression (H, H'). DEAB-treated embryos also exhibit normal expression levels of the Notch3 signaling pathway transcriptional target *her9* (J, J'), when compared to DMSO-treated controls (I, I'). (K) Quantitative real-time PCR analysis of *her9* expression in 17 hpf DMSOtreated controls and embryos treated with 5 μ M DEAB. Shown is the relative quantity of *her9* expression. Samples were normalized to *ef1a* and DMSO-treated was set to 1. Error bars indicate standard error of the mean. *Indicates the difference compared to control is significant by Student *t* test, *P* = 0.0198.

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Fig 7. RA-deficient embryos exhibit altered Cxcl12b chemokine signaling pathway component gene expression. (A-C') Representative flat-mount 17 hpf embryos following *in situ* hybridization analyses. Dorsal of gene expression is shown with anterior to the left. Compared to DMSO-treated controls (A), embryos treated with 5 µM DEAB (A') exhibit strongly reduced somitic *cxcr4a* gene expression, and narrowing of the *cxcr4a* expression domain within each somite. Compared to DMSO-treated controls (B, C), embryos treated with 5 µM DEAB exhibit subtly increased levels of somitic *cxcl12b* expression (B'), and subtly decreased levels of somitic *meox1* expression (C'). (D) Quantitative real-time PCR analysis of *cxcr4a* expression in 17 hpf DMSO-treated controls and embryos treated with 5 µM DEAB. Shown is the relative quantity of *cxcr4a* expression. Samples were normalized to *ef1a* and DMSO-treated was set to 1. Error bars indicate standard error of the mean. *Indicates the difference



compared to control is significant by Student *t* test, P < 0.0382. (E-H) Representative flat-mount 36 hpf embryos following *in situ* hybridization analyses of *cmyb* gene expression. Lateral view of gene expression in the dorsal aorta region of the trunk is shown with anterior to the left. Compared to DMSO-treated controls (E), embryos treated with 1 μ M DEAB (F) or 10 μ M AMD3100 (G) exhibit a small reduction *cmyb*-expressing cell numbers. Embryos treated with both 1 μ M DEAB and 10 μ M AMD310 (H) exhibit a more severe reduction in *cmyb*-expressing cell numbers. (I) Graph demonstrating the mean number of dorsal aorta *cmyb*-expressing cells in DMSO-treated controls, embryos treated with 1 μ M DEAB, 10 μ M AMD3100, or both 1 μ M DEAB and 10 μ M AMD310. Error bars represent standard error. *Indicates statistically significant difference compared to control ($P \le 0.0144$). **Indicates statistically significant difference compared to 1 μ M DEAB, and 10 μ M AMD3100 ($P \le 0.0028$). See text for statistical tests.

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Reference

 Pillay LM, Mackowetzky KJ, Widen SA, Waskiewicz AJ (2016) Somite-Derived Retinoic Acid Regulates Zebrafish Hematopoietic Stem Cell Formation. PLoS ONE 11(11): e0166040. doi:10.1371/journal. pone.0166040 PMID: 27861498