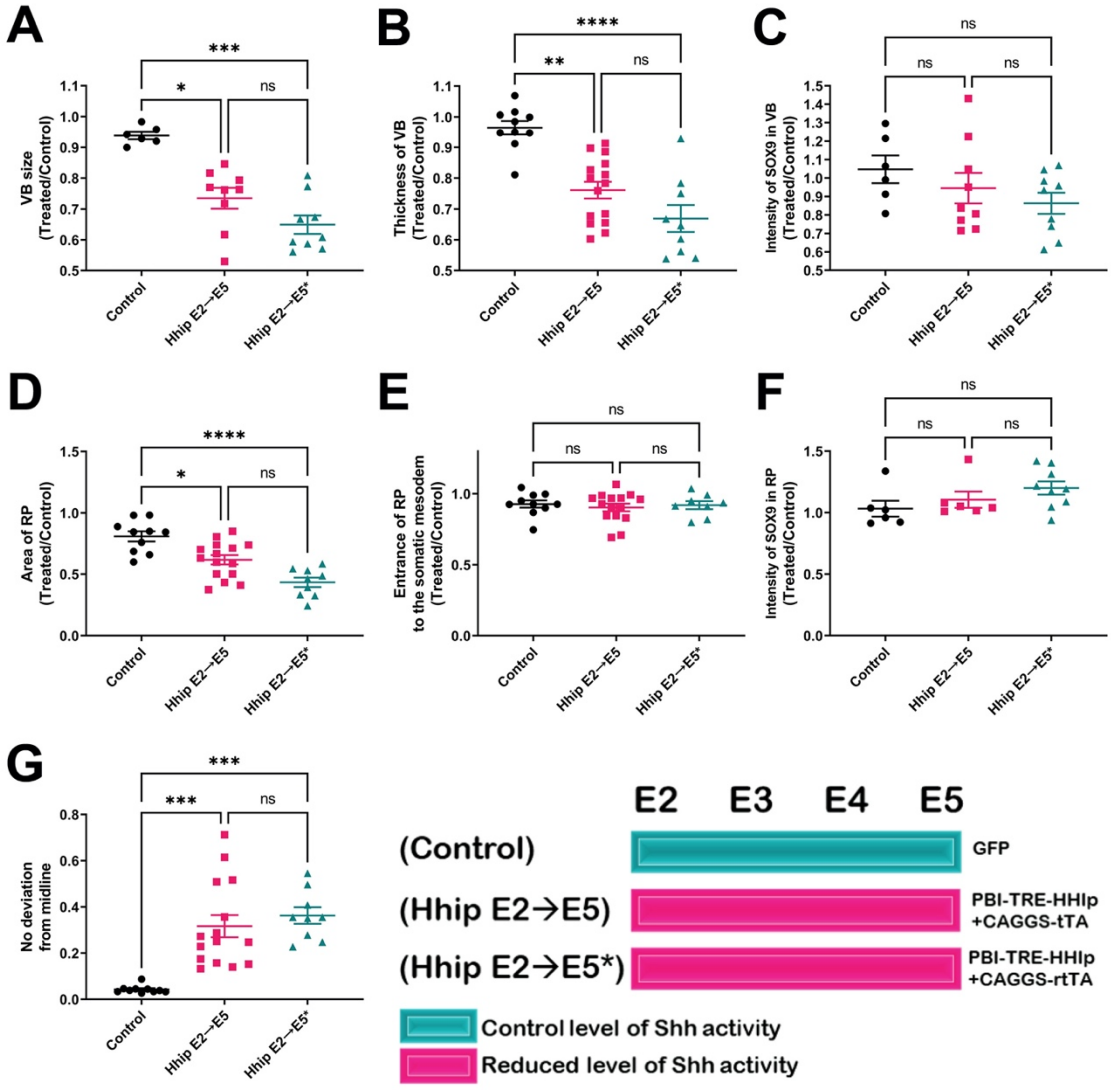
Legends to Supplementary Figures and Figures

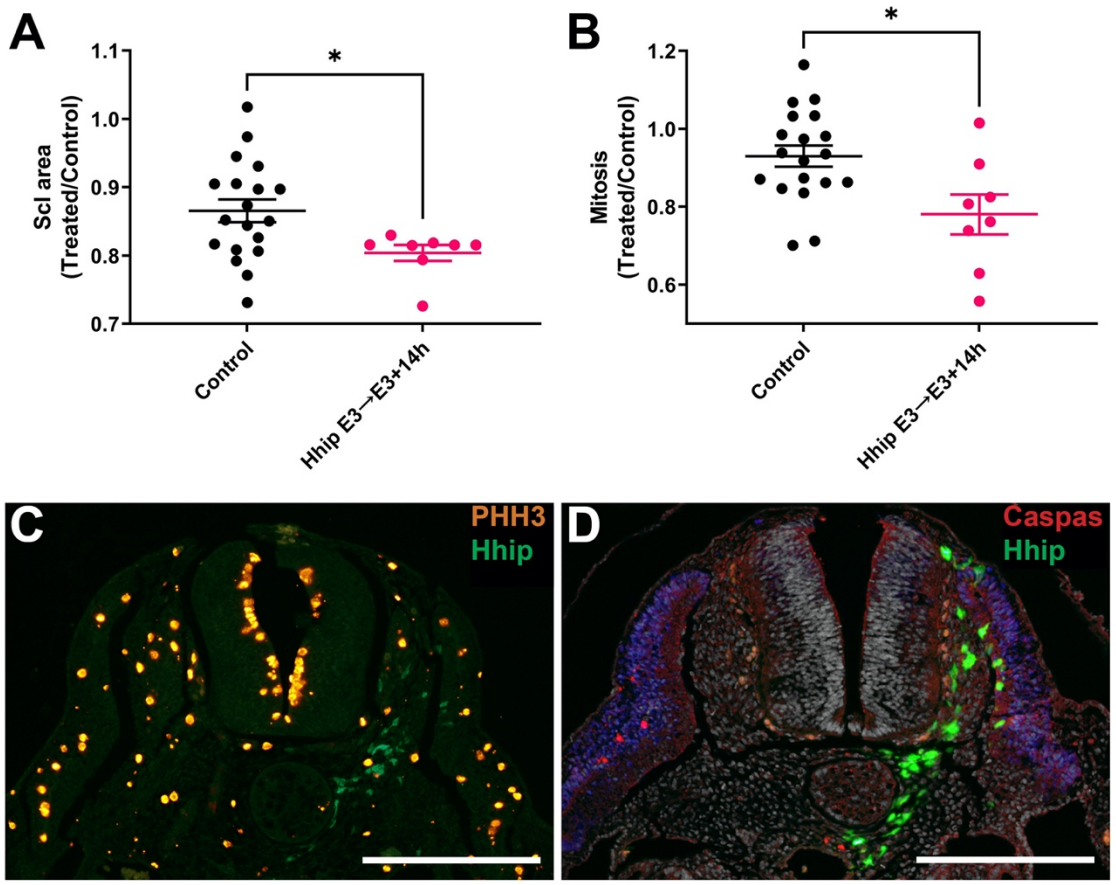
Supplementary Figure S1



Supplementary Figure S1- Inhibition of Shh by two conditional plasmids yield similar effects on skeletal development

To inhibit Shh from E2 until E5, 2 kinds of plasmids were implemented. PBI-TRE-Hhip+CAGGS-tTA, a version of Hhip that is active in absence of added doxycycline (HhipE2-E5), or PBI-TRE-Hhip+CAGGS-rtTA, a version of Hhip that is inactive unless doxycycline is added, followed by immediate treatment with the antibiotic (Hhip E2-E5*). (A-G) Quantifications of the effects of both plasmids compared with control GFP on selected parameters of skeletal development. For control vs. Hhip E2-5, or Hhip E2-5* , respectively, the number of embryos analyzed was: 6,9,9 embryos for VB size and SOX9 intensity in VB and RP; 10, 15, 9 for VB thickness, RP area and entrance into LPM and for notochord deviation. *P<0.05, **P<0.01, ***P<0.001, ****P<0.0001, ns-not significant.

Supplementary Figure S2



Supplementary Figure S2- Reduced sclerotome area and cell proliferation, but not survival, upon activation of Hhip at E3

Control GFP or Hhip were electroporated at E2 and activated at E3 for 14 hours. (A) Quantification of sclerotome area. (B) Quantification of PHH3+ mitoses. (C,D) Transverse sections showing reduced number of mitoses in the treated (right) compared to contralateral side (C), and the virtual absence of caspase+ cells in either treated or control sides at this stage (D). N=19 and 8 embryos measured for control or Hhip, respectively. Bar= 200μM.