



**Supplementary Figure 8. Blocking cell division rescues *MZtri* neurulation defects.** WT (a,b,e,f) and *MZtri* (c,d,g,h) embryos were incubated in 4% DMSO (a,e,c,g), or in a solution of 150  $\mu$ m aphidicolin and 20 mM hydroxyurea with 4% DMSO (b,f,d,h) in order to inhibit cell division. Treatment was initiated at 80% epiboly, and embryos were cultured overnight until 22- to 24-somite stages. (a-b) Lateral and dorsal views of WT embryos demonstrating that embryogenesis proceeds relatively normally in the presence of cell division inhibitors. (c-d) Blocking cell division appears to rescue CE defects associated with the somitic mesoderm (arrowheads in c' and d') and neural plate (arrows in c' and d') of *MZtri* mutants. (e-h) Transverse sections through the trunk of WT and *MZtri* embryos stained for *sonic hedgehog* (*shh*) expression. *shh* floor plate expression (arrowheads) appears normal in WT embryos treated with (f) or without (e) cell division inhibitors. The expanded *shh* expression observed in the floorplate of *MZtri* embryos (arrowheads in g) is rescued upon blocking cell division (arrowhead in h).