

Table S2. Summary of the comparative phenotypic analysis of *Zfp568^{chato}*, *Trim28^{chatwo}*, *Trim28^{chatwo/KO}*, *Trim28^{KO/KO}* and *Sox2Cre; Trim28^{L2/KO}* embryos

Genotype	Embryonic arrest at	brachyury expression	Convergent extension defects	Yolk sac blistering	Yolk sac vasculogenesis defects	Allantois defects	Expanded chorion
<i>Zfp568^{chato}</i>	E8.5	normal [‡]	yes (Fig. 1) [‡]	yes (Fig. 1) [‡]	yes [§]	yes [§]	yes (Fig.1) [§]
<i>Trim28^{chatwo}</i>	E8.5	normal (Fig. S1)	yes (Fig. 1)	yes (Figs 1, S1, S2)	yes (ns)	yes (Fig. S2)	no (Figs 1, S2)
	E7.5	normal (Fig. S1)	*	yes (Fig. S1)	*	*	*
<i>Trim28^{chatwo/KO}</i>	E8.5	normal (Fig. 2)	yes (Fig. 2; ns)	yes (Fig. 2)	na	na	no (ns)
	E7.5	normal (Fig. 2)	*	yes (Fig. 2)	*	*	*
<i>Trim28^{KO/KO}</i>	E5.5	absent (Fig. 2) [¶]	*	yes [¶]	*	*	*
<i>Sox2Cre; Trim28^{L2/KO}</i>	>E8.5	normal (ns)	yes (Fig. 3)	no (Fig. 3) **	yes (Fig. 3)	yes (Fig. 3)	no (Fig. 3) **

The figures or previous publications providing evidence for each of the phenotypic features are indicated in brackets or superscripts, respectively. Boxes shaded in light gray indicate the most common phenotype to all mutant conditions analyzed. Dark gray-shaded boxes indicate phenotypic features that, for some mutants, differed from those most commonly observed in the other conditions analyzed.

[‡]Garcia-Garcia et al., 2008.

[§]Shibata and Garcia-Garcia, 2011.

[¶]Cammas et al., 2000.

ns, results not shown; na, not assayed.

*Features for which analysis is prevented by the early lethality of the mutant embryos.

**Phenotypes could be due to the presence of wild-type TRIM28 in *Sox2Cre; Trim28^{L2/KO}* embryos as shown in supplementary material Fig. S3 and mentioned in the Results section.