

Supporting information

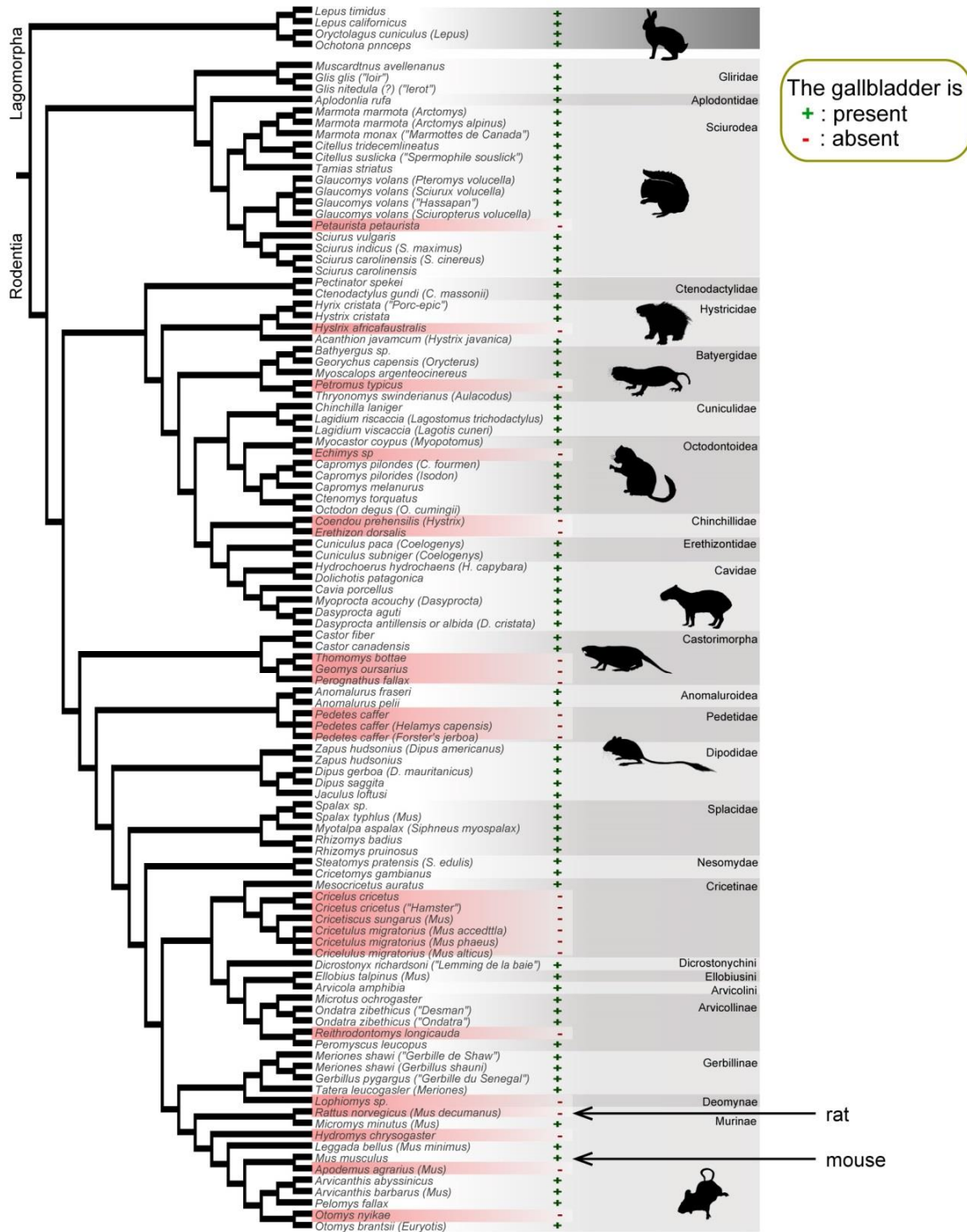


Fig. S1 The presence and absence of a gallbladder in a phylogenetic tree of rodents. The phylogenetic framework is based on Fabre et al. (2012). The topology of the tree was arranged in Mesquite (Maddison and Maddison, 2011). The presence and absence of the gallbladder in most animals is from Gorham and Ivy (1937). The cases of the *Cricetomys gambianus* and *Mesocricetus auratus* are referring Nzalak et al. (2010) and Oldham-Ott and Gilloteaux (1997), respectively. The silhouette images are from PhyloPic (<http://phylopic.org/>).

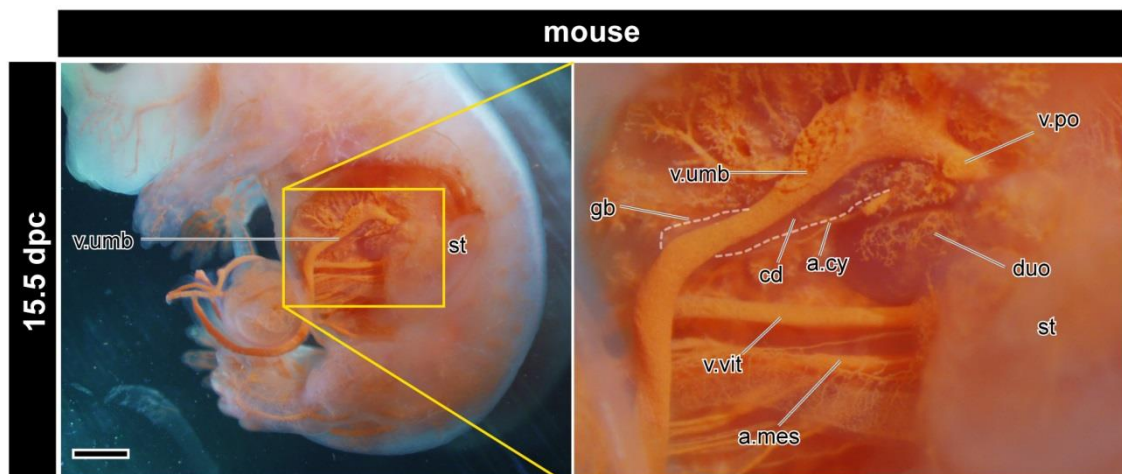


Fig. S2 Whole-mount anatomy of the abdominal cavity of the murine fetus at 15.5 dpc. The red-coloured latex was injected from the umbilical vein. The left half of the liver was removed. Scale bar = 500 μ m.

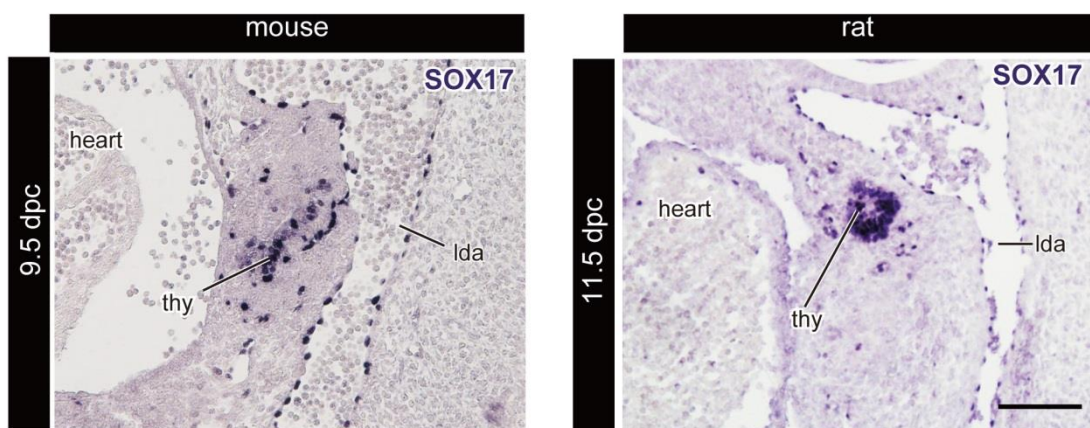


Fig. S3 SOX17-positive structures in mouse and rat embryos. The sections are from the same individuals shown in Figure 5. SOX17 signals were clearly found in the thyroid and endoderm of blood vessels in both animals. Scale bars = 100 μ m.