

**Supplemental\_Figure\_S1, related to Fig. 1.** (A) Schematic representation of the *Tarbp2* <sup>tm1reb</sup> allele. A cassette containing negative (DTA) selection, positive selection (Neomycin, Neo) and lacZ was inserted into exon2 with a 5' splice acceptor (sa) sequence. B=BamHI, K=KpnI. (B)  $\beta$ -galactosidase activity in *Tarbp2* <sup>tm1Reb/+</sup> embryos from E8.5 to E13.5 stage of development. (C)  $\beta$ -galactosidase activity in sections of E13.5 organs of *Tarbp2* <sup>tm1Reb/+</sup> transcriptional reporter mice (blue=  $\beta$ -gal, red=nuclear fast red). Top and bottom insets show higher magnification images of indicated genotypes. Scale bar, 200um. RT-PCR in wild-type E13.5 organs total RNA extracts for *Tarbp2* (M/H Brain, mid/hind brain). (D)  $\beta$ -galactosidase activity in cross-sections of adult testis of *Tarbp2* <sup>tm1Reb/+</sup> transcriptional reporter mice (blue=  $\beta$ -gal, red=nuclear fast red). Top insets show higher magnification images of *Tarbp2* expression. Scale bar - 200um. (E) Alizarin red (bone) and alcian blue (cartilage) staining of E15.5 wild type and *Tarbp2* <sup>-/-</sup> B6 embryos showing defects in developmental patterning. (F) microCT scans of E15.5 wild-type and *Tarbp2* <sup>-/-</sup> B6 embryos, red outline shows smaller volume in mutant.

Supplemental\_Fig\_S1

