



**Fig. S5: Requirement for *Dazl* in diverse strains of mice.**

(A) Immunofluorescence of post-natal day five testes from control and *Dazl*-deficient mice of indicated strains. Germ cells stained with GCNA (green), and Sertoli cells with SOX9 (magenta). (Scale bar, 50  $\mu\text{m}$ .) (B) Histology of control and 129S4.*Dazl*-deficient testis stained with periodic acid-Schiff at 20 days of age. Germ cells in control animals (upper panel) synchronously undertake spermatogenesis. In 129S4.*Dazl*-deficient mice, spermatogenesis is disrupted (lower panel): in these testes, spermatogonia at the basement membrane proliferate (asterisk) and commence spermatogenesis, but fail to progress beyond the zygotene stage (arrow). Germ cell death is widely observed in the 129S4.*Dazl*-deficient testis (open arrow-head). (Scale bar, 50  $\mu\text{m}$ .) (C) Meiotic spreads of spermatocytes show asynapsis of some chromosomes in *Dazl*-deficient mice; these cells do not progress beyond the zygotene stage on a 129S4 background. (Scale bar, 5  $\mu\text{m}$ .) (D) Histology of control and *Dazl*-deficient ovaries stained with periodic acid-Schiff. Primordial follicles in control ovaries are marked (arrow). (Scale bar, 50  $\mu\text{m}$ .) (E) Immunofluorescence of embryonic day 17.5 testes from control and *Dazl*-deficient mice of indicated strains. Germline cells stained with DDX4 (red) and Sertoli cells with SOX9 (blue). EdU (green) marks DNA synthesis, a feature of mitotic activity. Extended proliferation of the *Dazl*-deficient germline is marked (arrow). (Scale bar, 50  $\mu\text{m}$ .) (F) Incidence of testicular teratomas in control and *Dazl*-deficient mice in each strain background.