Supplementary Figures

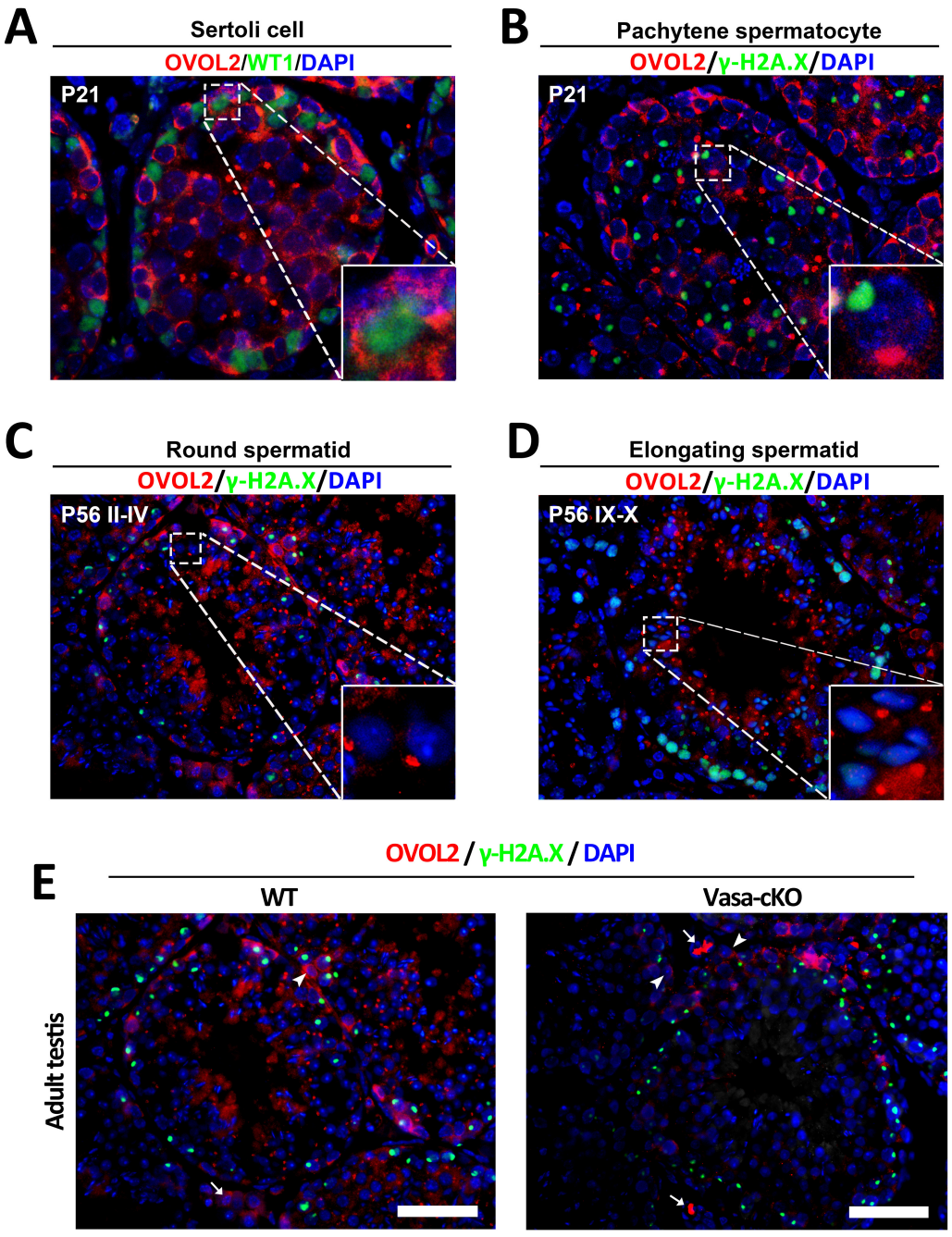

Figure S1. The localization of OVOL2 in mouse testicular sections was revealed by immunofluorescence. **(A)** Co-immunofluorescent staining for OVOL2 and WT1 (a Sertoli cell marker) antibodies on P21 WT testicular section showing OVOL2 expressed in Sertoli cells. Nuclei were stained with DAPI. **(B)** Co-immunofluorescent staining for OVOL2 and γ-H2A.X antibodies on P21 testicular section showing OVOL2 expressed in pachytene spermatocytes. Nuclei were stained with DAPI. **(C)** Co-

immunofluorescent staining for OVOL2 and γ-H2A.X antibodies on P56 testicular section showing OVOL2 expressed in round spermatids. Nuclei were stained with DAPI. **(D)** Co-immunofluorescent staining for OVOL2 and γ-H2A.X antibodies on P56 testicular section showing OVOL2 expressed in elongating spermatids. Nuclei were stained with DAPI. (**E**) Co-immunofluorescent staining for OVOL2 and γ-H2A.X antibodies on WT and Vasa-cKO (Vasa-cre; *Ovol2*$^{lox/lox}$) testis sections at adulthood. Nuclei were stained with DAPI. Arrowheads indicate Sertoli cell; Arrows indicate Leydig cells. Scale bar bar=50μm.

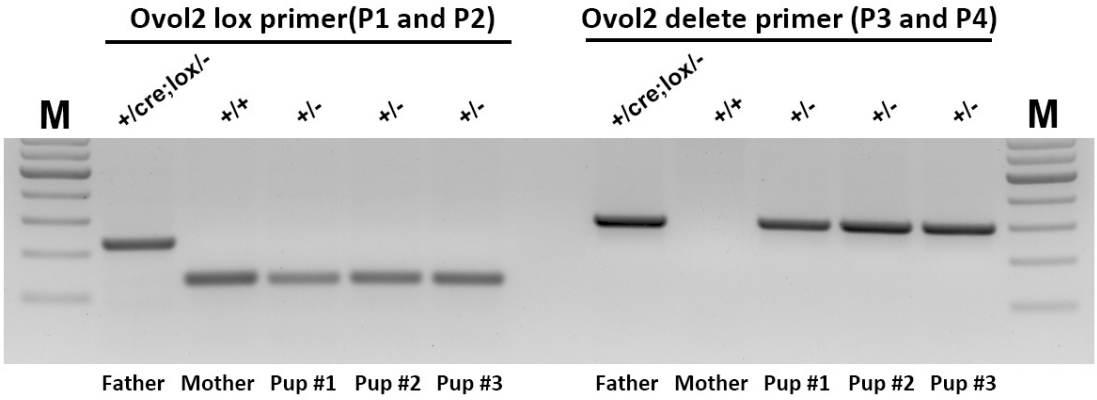

Figure S2. PCR based genotyping of the offspring derived from the Vasa-cKO (Vasa-cre; Ovol2$^{lox/del}$) male breeding pairs. All pups are contains delete allele.