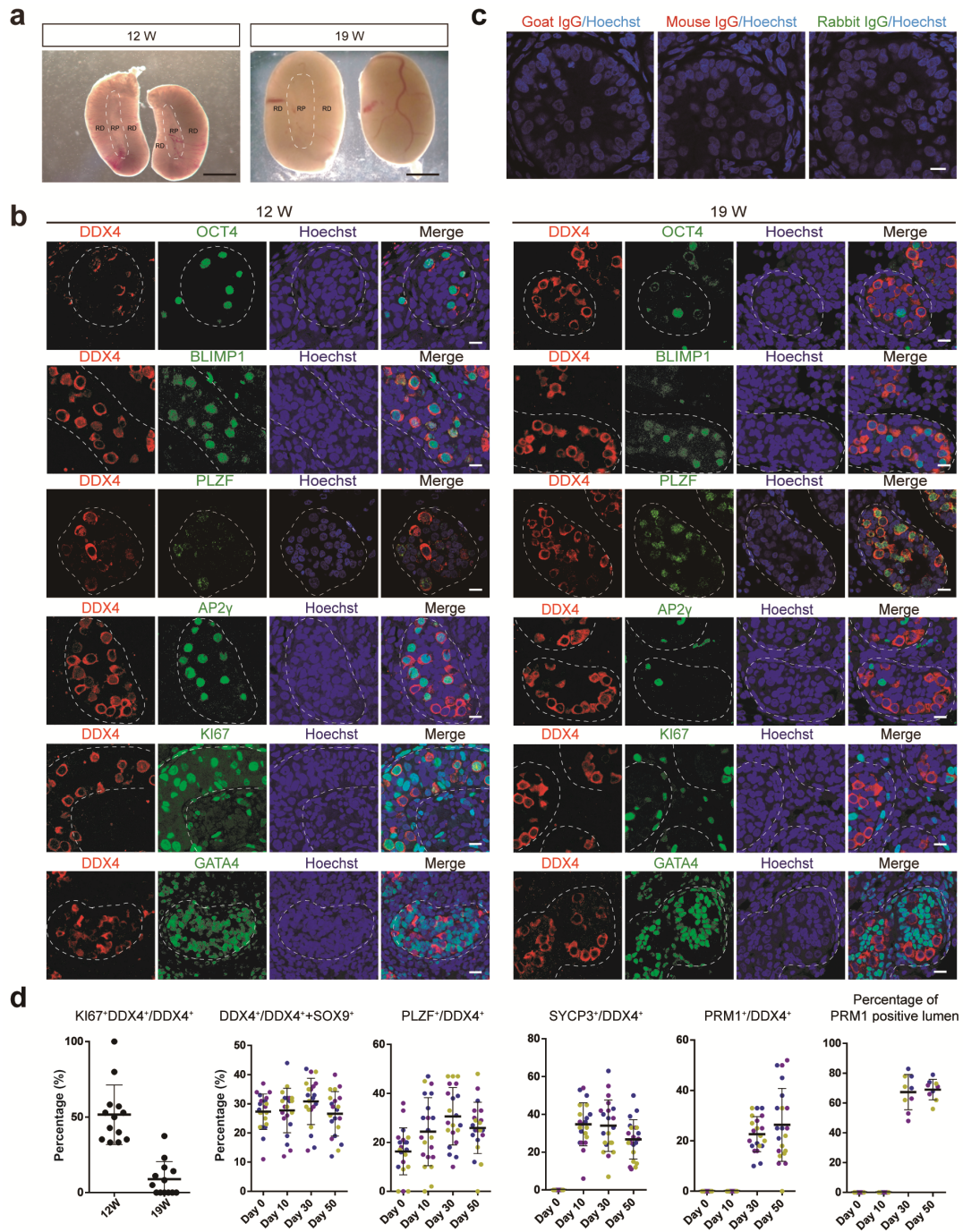


**Figure S1. Properties of germ cells of male human fetal gonads. Related to Fig. 1.**



**a**, Fetal gonads from week 12 and 19 aborted fetuses. RP, Region proximal to mesonephros; RD, Region distal to mesonephros. Scale bars, 200  $\mu$ m.

**b**, Immunostaining for DDX4 (red) in combination with OCT4 (green), BLIMP1 (green), PLZF (green), AP2 $\gamma$  (green), Ki67 (green) or GATA4 (green), and DNA (Hoechst 33342 blue) in 12- and 19-week fetal gonads subjected to culture; Scale bars =10 $\mu$ m.

**c**, Replacement of primary antibodies with isotype IgGs were utilized as negative controls; Scale bars =10 $\mu$ m.

**d**, Percentage of proliferating germ cells (Ki-67+, DDX4+) in all germ cells (DDX4+) in 12 and 19 week genital ridges, and proportions of different cell types (the different colors of the dots represent different specimens) (germ cells, DDX4+; (pro)spermatogonia, PLZF+; spermatocytes, SYCP3+; spermatids, PRM1+; Sertoli cells, SOX9+) in cross-sections of tissues from week 12-14 genital ridges cultured for 0, 10, 30 and 50 days.