

Figure S1: DDX4-EGFP genotyping. Tail DNA was isolated from pups born after embryo transfer and subjected to PCR to detect the EGFP transgene. Female #2738 was identified as transgenic and served as the founder animal for the established DDX4-EGFP line.



Figure S2: EGFP expression in DDX4 positive germ cells in fetal testes and ovaries. EGFP expression was not detectable in DDX4 positive germ cells in gestation day 15.5 (A-F), but was observed in DDX4 positive germ cells in gestation day 18.5 (G-L).



Figure S3: DDX4-EGFP co-staining on wildtype rat testis and ovary sections.

EGFP was absent in DDX4 positive adult male and female germ cells in wildtype testis and ovaries.



Figure S4: SALL4 and ZBTB16 are conserved markers in rat spermatogonia.

SALL4 (green) and ZBTB16 (red) were observed in rat spermatogonia along the

basement membrane in the adult rat testis. Scale = $100 \ \mu m$.



Figure S5: SALL4 and EGFP expression in PND8 and adult rat testis. Post-natal day 8 and adult DDX4-EGFP rat testis tissue sections were co-stained for SALL4 and EGFP. (A-C) Post-natal day 8 testis staining for EGFP (green) and SALL4 (red). All SALL4 positive cells were also positive for EGFP. (D-F) Adult rat testis staining for EGFP (green) and SALL4 (red). The majority of SALL4 positive cells also expressed EGFP (arrowheads), but a few SALL4 positive cells exhibited weak or undetectable EGFP expression (arrows). Nuclei are stained blue with DAPI. Scale bar = 50µm