## 1 Leukemia Inhibitory Factor-Receptor is Dispensable for Prenatal Testis

2 Development but is Required in Sertoli cells for Normal Spermatogenesis in

## **3 Mice.**

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## 18 Supplementary Information



Supplemental Figure 1. Altered seminiferous tubule lumen and seminiferous epithelium in SC-KO testes. A two-fold increase in percentage volume of the tubule lumen (A) and a 25% reduction in the seminiferous epithelium (B) was observed when *Lifr* is disrupted in Sertoli cells (Unpaired *t*-tests; \*\*\* p =0.0002 and \*\*\*\* p = <0.0001 respectively, n = 7).



Supplemental Figure 2. No additional effect is observed when *Lifr* is disrupted in both germ cells and Sertoli cells. (A) No significant difference in testis weight at d180 was observed when *Lifr* is disrupted in both germ cells and Sertoli cells (GC+SC-KO; 1-way AVOVA, n = 6-13). (B) Representative H&E staining of WT, GC-KO, SC-KO and GC+SC-KO testes at d180. Testicular phenotype was similar in both SC-KO and GC+SC-KO confirming that *Lifr* is dispensable in germ cells but not Sertoli cells for normal spermatogenic function. Scale = 100µm.



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Supplemental Figure 3. Spermatocyte and spermatid volume is unaltered in SC-KO testes. No difference in (A) spermatocyte or (B) spermatid volume per testis was observed between WT and SC-KO mice (unpaired t-test; n = 7).

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## 36 Full images of blots from figures 1C and 3F and G.



7% Tris-Acetate polyacrylamide gel (Thermo Fisher, UK)/Immobilon-Fl membrane (Merk Millipore, UK) Adult Testis Protein Exrtact

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