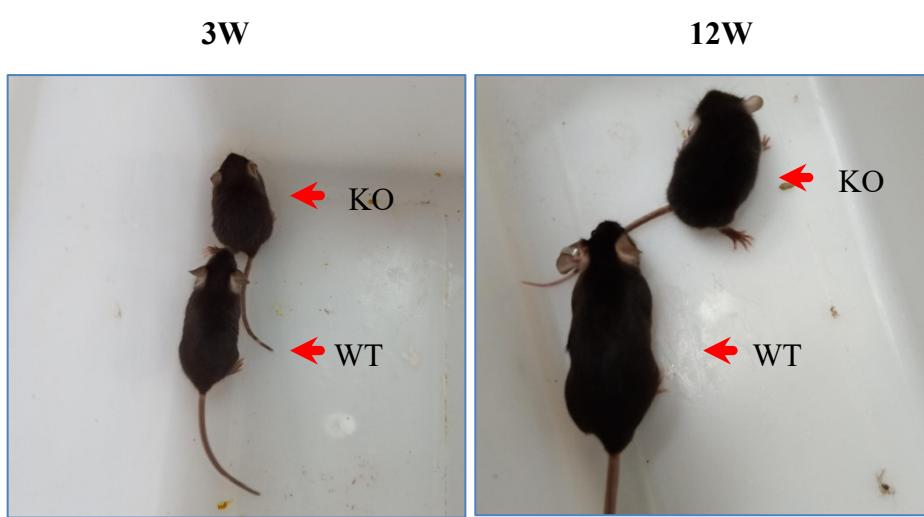
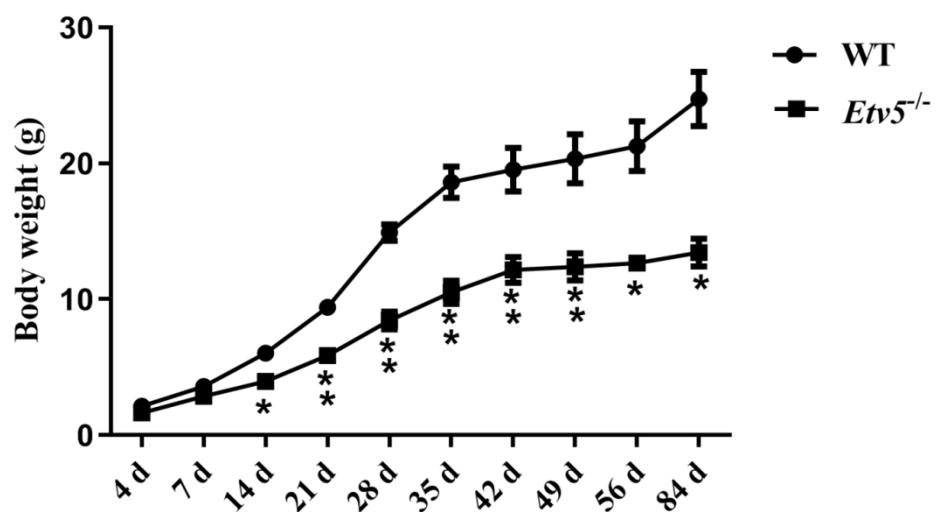
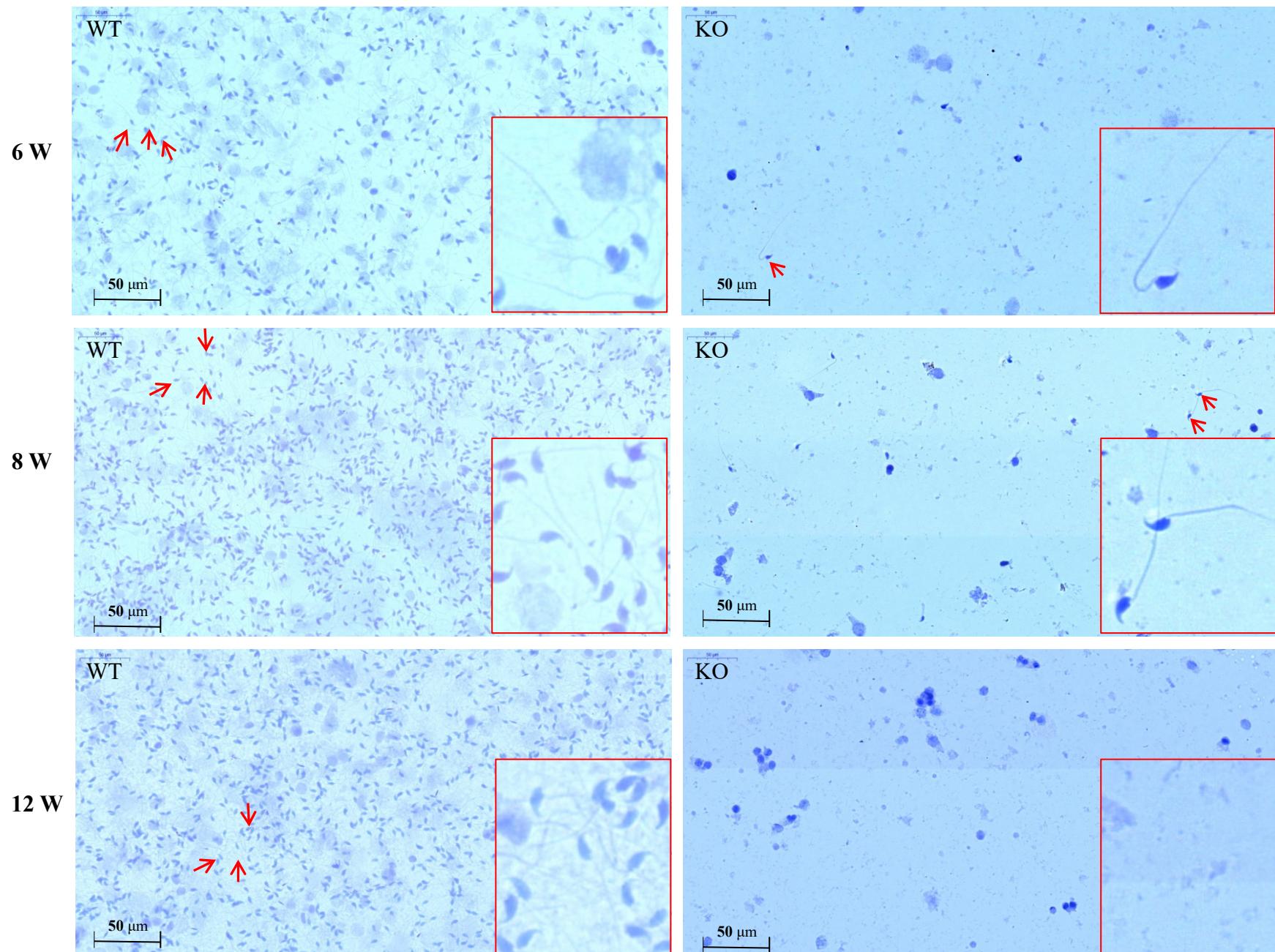


**A****B**

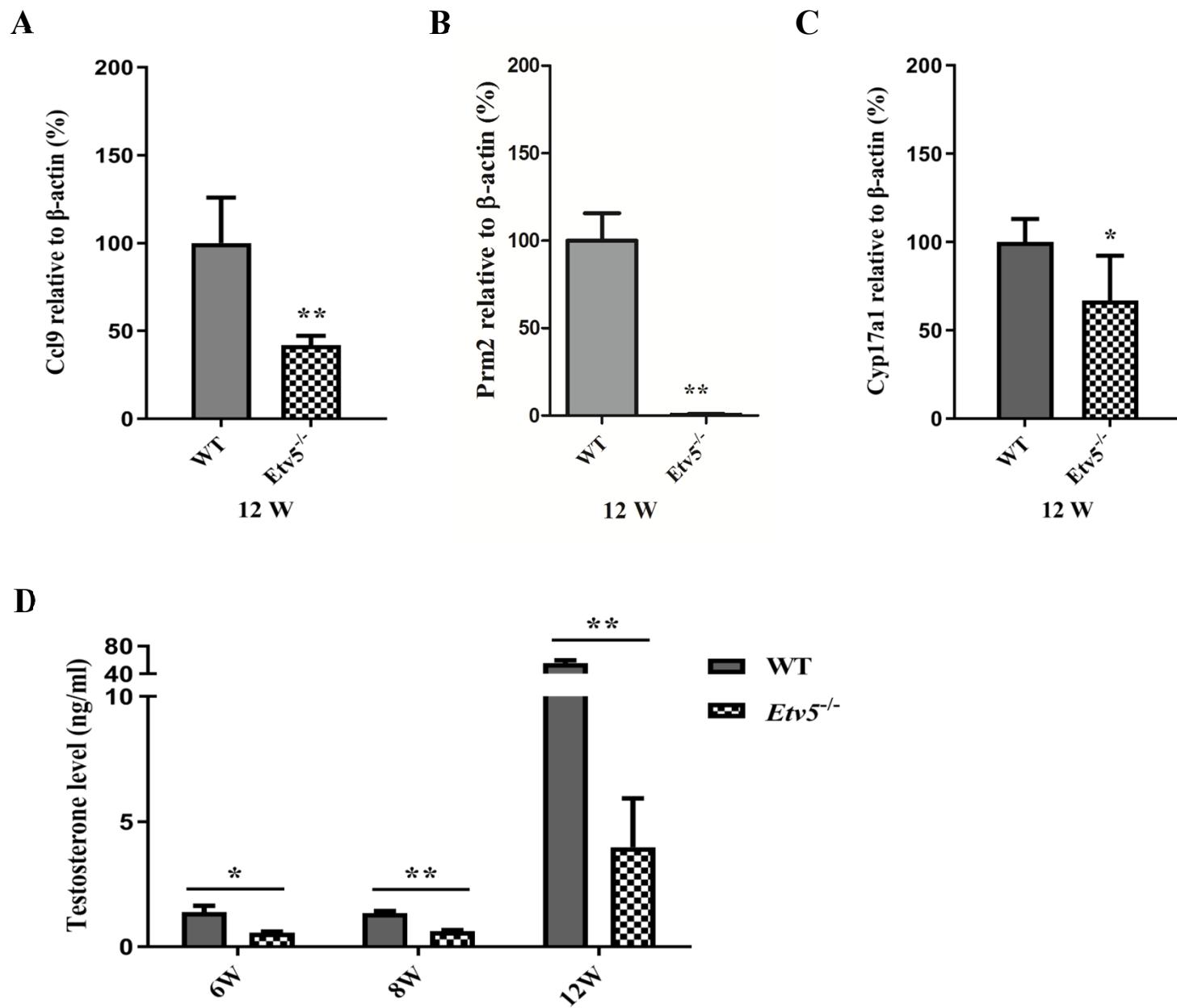
## Supplementary Fig. 1

**Fig. S1. Body weight of KO mice.** (A) The phenotype of WT and *Etv5*<sup>-/-</sup> mice at 3 and 12 weeks of age. Arrows indicate *Etv5*<sup>-/-</sup> and WT mice. (B) Body weight of WT and *Etv5*<sup>-/-</sup> mice at periodic time points during development from 4 postnatal days to adulthood (12 weeks). For all time points, n = 5 for both WT and *Etv5*<sup>-/-</sup> mice. Data presented as mean ± S.D. \*P<0.05, \*\*P<0.01, assessed by unpaired t-test.



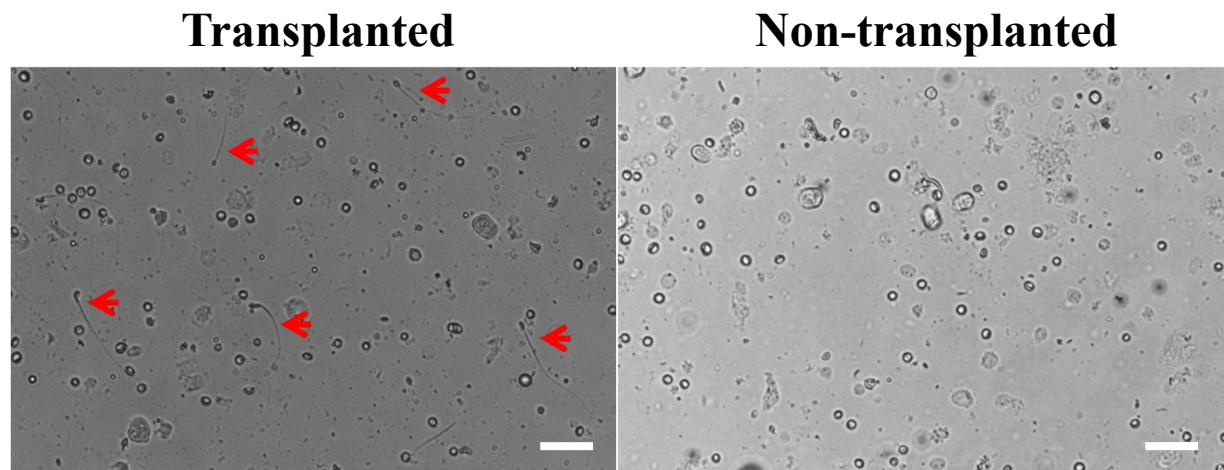
**Supplementary Fig. 2**

**Fig. S2. Sperm density in the epididymis in 6-, 8-, and 12-week WT and *Etv5*<sup>-/-</sup> mice.** Arrows indicate sperm and the insert represents the higher magnification of sperm. Scale bars = 50  $\mu$ m.



Supplementary Fig. 3

**Fig. S3. Changes in gene expression related to spermatogenesis and testosterone concentrations.** mRNA expression levels of *Etv5* target gene *Ccl9* (A), spermatids-specific gene *Prm2* (B) and interstitial gland-specific gene *Cyp17a1* (C) in the testes of WT and *Etv5*<sup>-/-</sup> mice littermates at 12 weeks. WT values were set as 100%. (D) Testosterone concentrations of WT and *Etv5*<sup>-/-</sup> littermates at 6, 8 and 12 weeks. n = 3 per group. Data presented as mean ± S.D. \*P<0.05, \*\*P<0.01, assessed by unpaired t-test.



## Supplementary Fig. 4

**Fig. S4. Sperm regeneration.** The sperm collected from epididymis in recipient mice 2 months post-transplantation. Mature sperm with intact shape can be observed (Red arrows). Scale bars = 50  $\mu$ m.