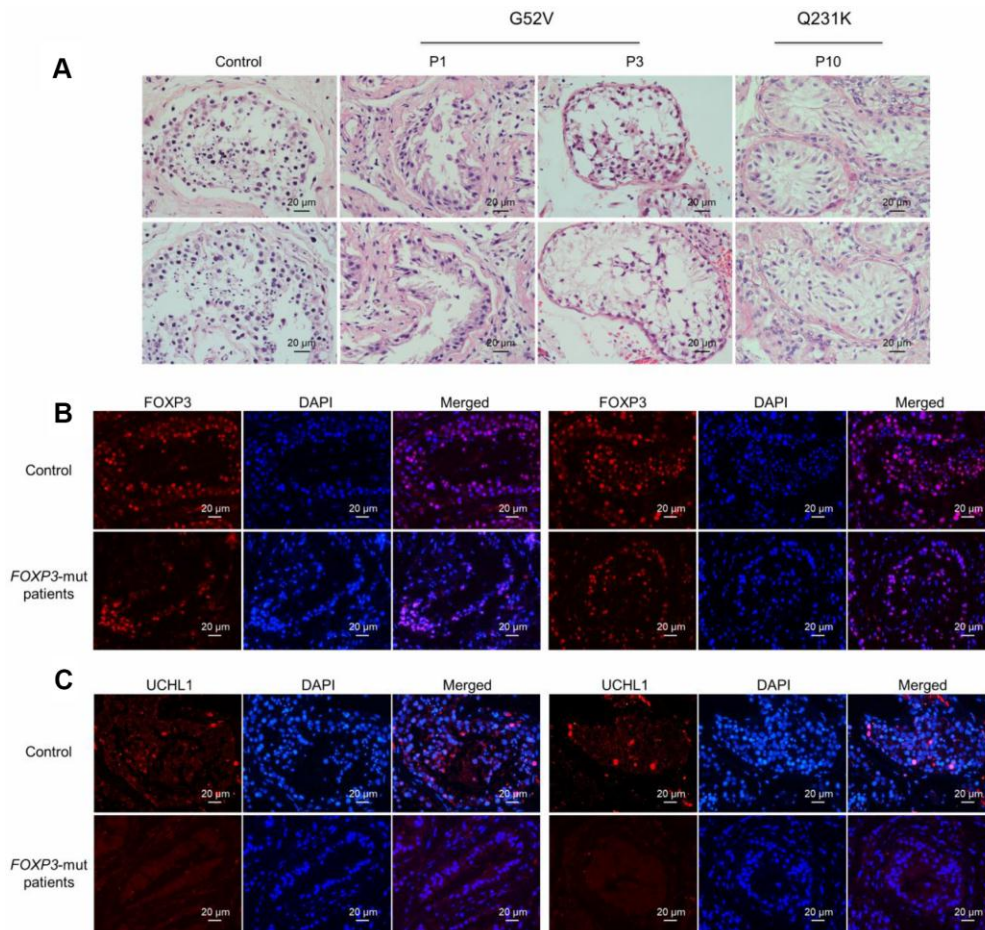
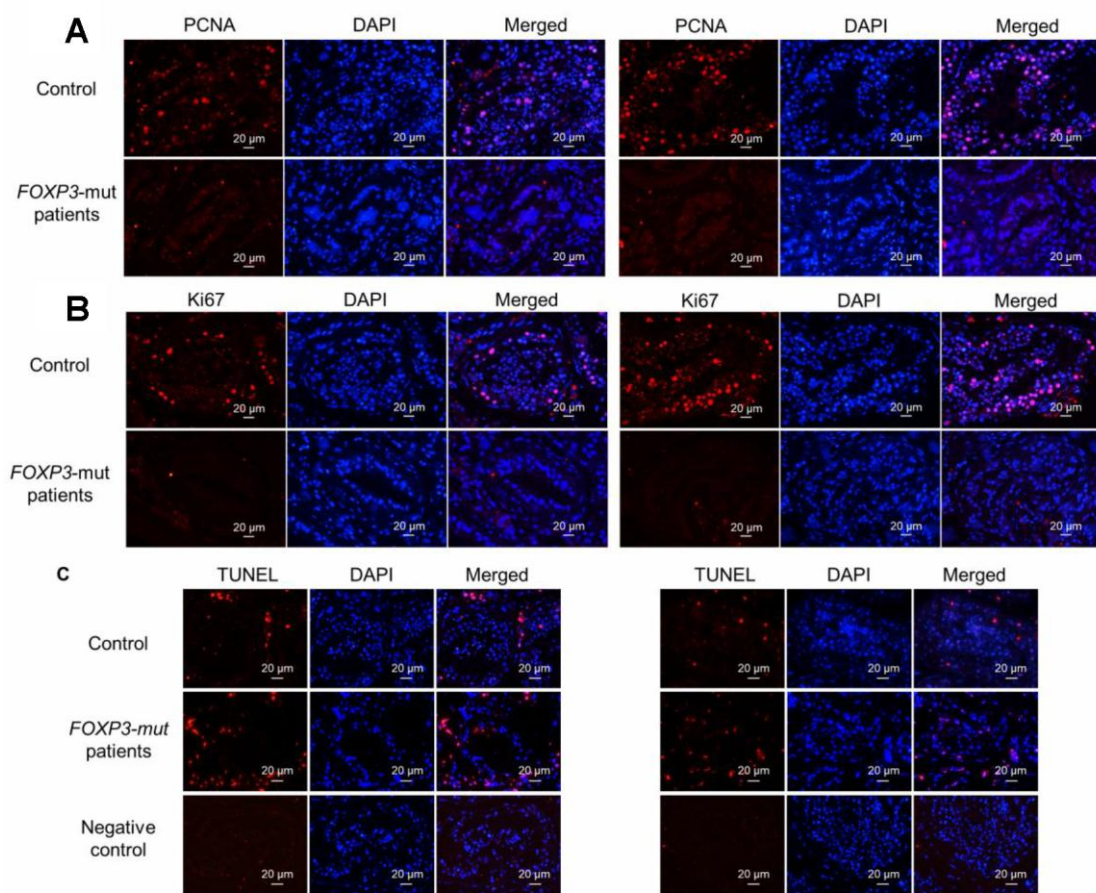


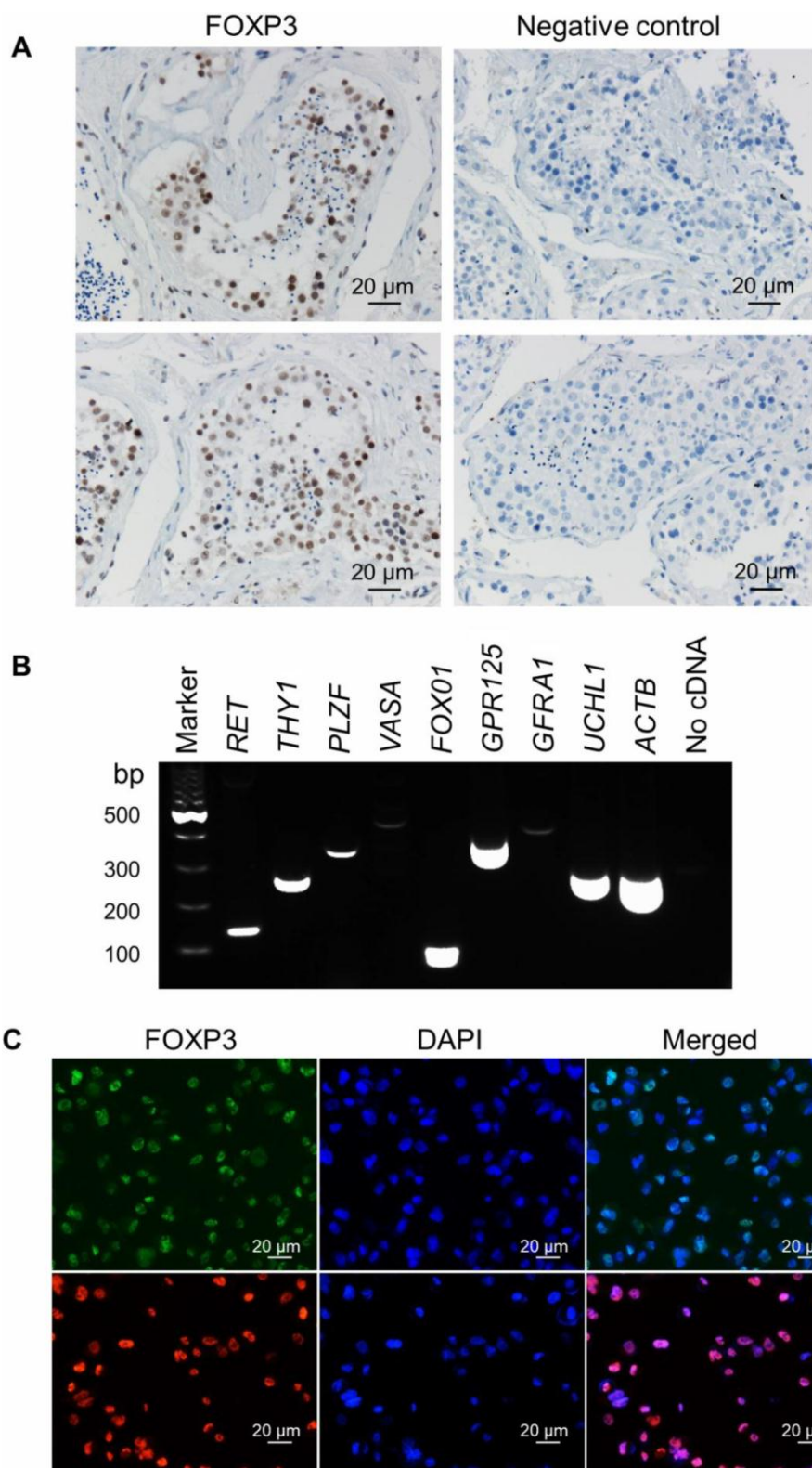
## SUPPLEMENTARY FIGURES



**Supplementary Figure 1. Morphology and phenotype of *FOXP3*-mut NOA patients and OA controls.** Representative data for the morphology of testis (A) and the expression of FOXP3 (B) and UCHL1 (C) in *FOXP3*-mut NOA patients and OA control.

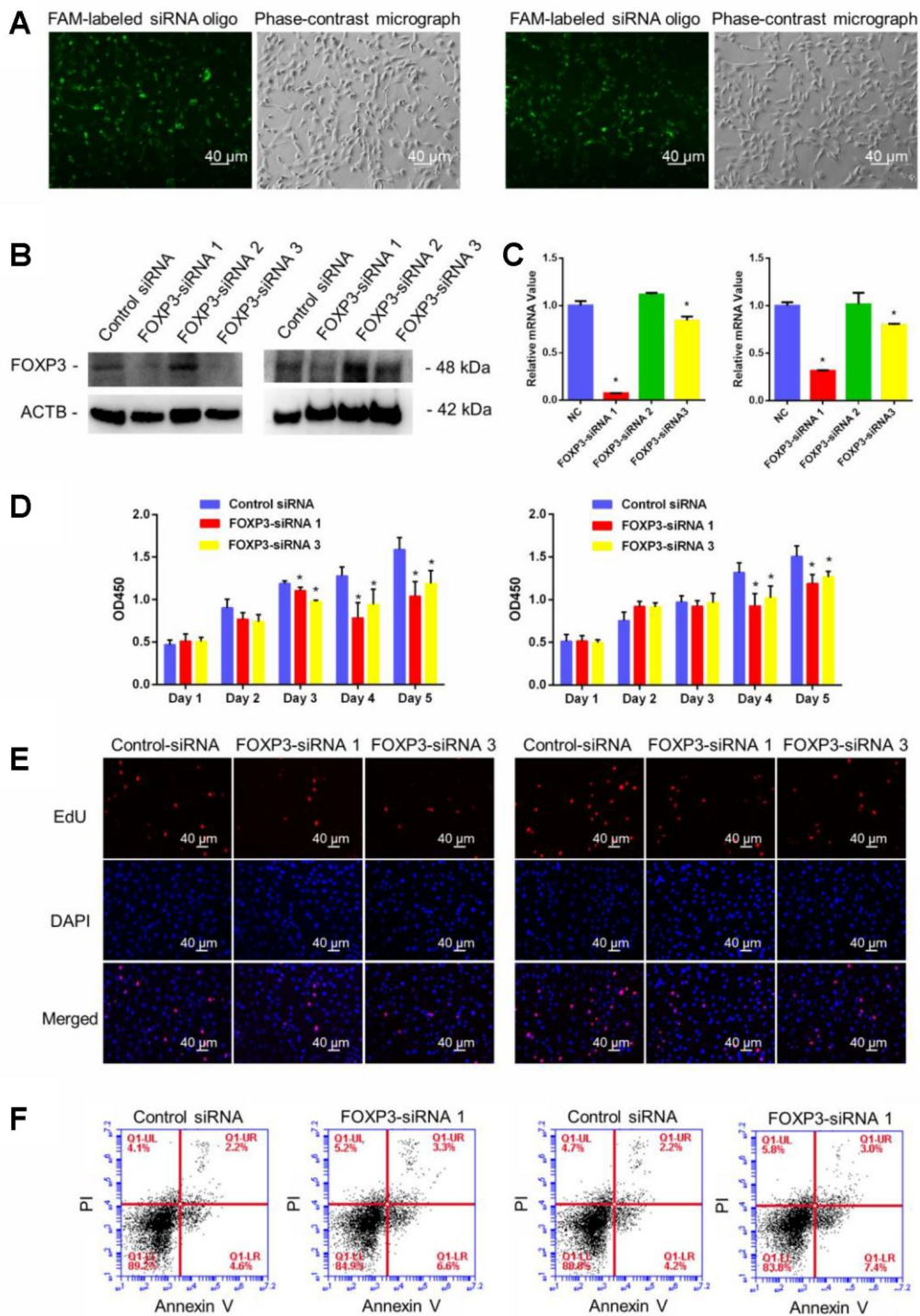


**Supplementary Figure 2. Cell proliferation and apoptosis in the testis of *FOXP3*-mut NOA patients and OA controls.** Representative results for the expression of PCNA (A), Ki67 (B) and TUNEL-positive cells (C) in *FOXP3*-mut NOA patients and OA control.

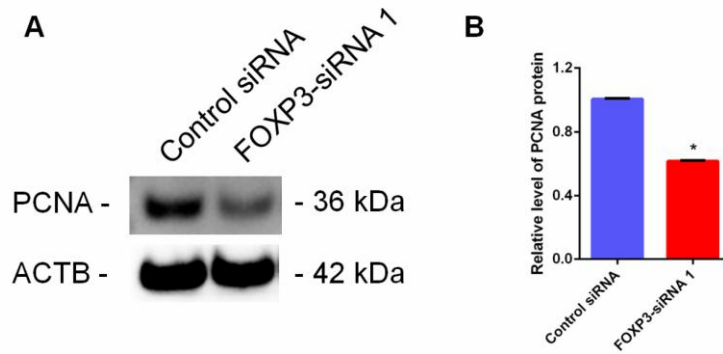


**Supplementary Figure 3. Expression and location of FOXP3 proteins in human testes and human SSC line.** Representative data for cellular localization of FOXP3 in human OA testes (A), the transcripts of *GPR125*, *THY1*, *PLZF*, *UCHL1*, *GFRA1*, *RET* and *VASA* in human SSC line (B), and FOXP3 expression in human SSC line (C).

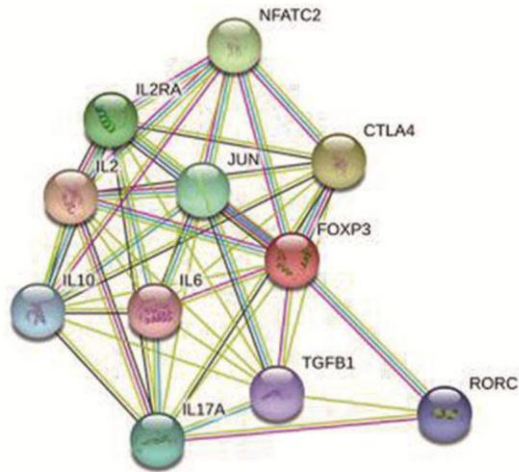




**Supplementary Figure 4. Effect of FOXP3 silencing on the proliferation, DNA synthesis and apoptosis of human SSC line.** Representative results for the transfection efficiency of FOXP3-siRNAs (A), the levels of FOXP3 protein (B) and *FOXP3* transcript (C) by FOXP3-siRNAs in human SSC line, as well as the percentages of the proliferation (D), EDU-positive cells (E) and apoptosis (F) by FOXP3-siRNAs in human SSC line.



**Supplementary Figure 5. Effect of FOXP3 on cell proliferation of human SSC line.** (A) Western blots demonstrated PCNA expression in human SSCs at day 3 after transfection of FOXP3-siRNA 1. ACTB served as the loading control of protein. (B) The relative expression of PCNA in human SSCs at day 3 after transfection of FOXP3-siRNA 1 after normalization to the signals of their loading control. \* indicated statistical significance ( $p < 0.05$ ) between FOXP3-siRNA 1 and control siRNA treatments.



**Supplementary Figure 6. Predicted partners and regulatory pattern of FOXP3.** The main targets for FOXP3 were identified as ILs, TGFβ1, CTLA4 and JUN.