hPSMA

Nomenclature	C57BL/6Smoc-*Folh1*$^{em1(hPSMA-Wpre-PA)Smoc}$
Cat. NO.	NM-HU-200240
Strain State	Embryo cryopreservation

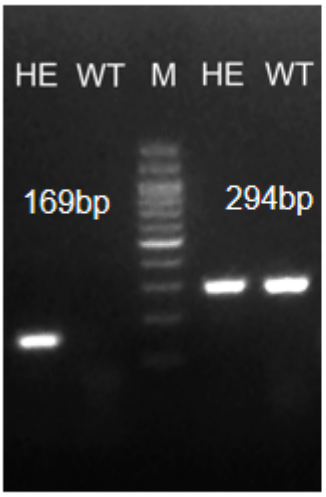
Gene Summary

Gene Symbol Folh1	**Synonyms**	GCP2; mopsm
	NCBI ID	53320
	MGI ID	1858193
	Ensembl ID	ENSMUSG00000001773
	Human Ortholog	FOLH1B

Model Description

The endogenous mice Folh1 gene was replaced by human PSMA gene.
*Literature published using this strain should indicate: hPSMA mice (Cat. NO. NM-HU-200240) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data



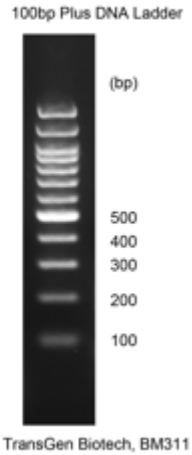


Fig1. Detection of PSMA expression in kidney by RT-PCR. Wild type: only one band at 294 bp with primers F1/R1(mPsma);Heterozygous: one band at 294 bp with primers F1/R1(mPsma) and one band at 169 bp with primers F2/R2(hPSMA); Abbr.. M, DNA marker; HO, homozygous; HE, heterozygous; WT, wild type.

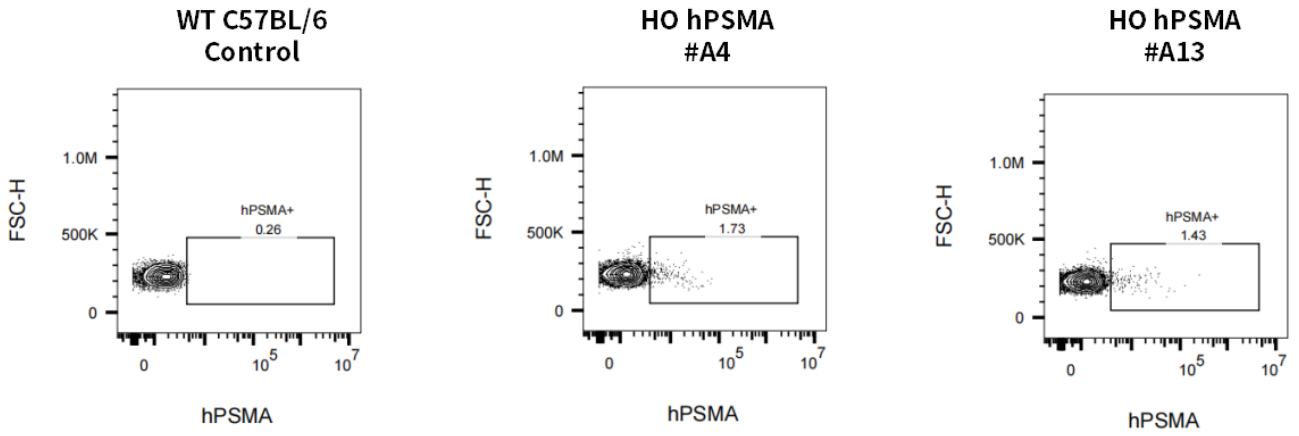


Fig2. Detection of hPSMA expression in prostate in hPSMA KI mice.

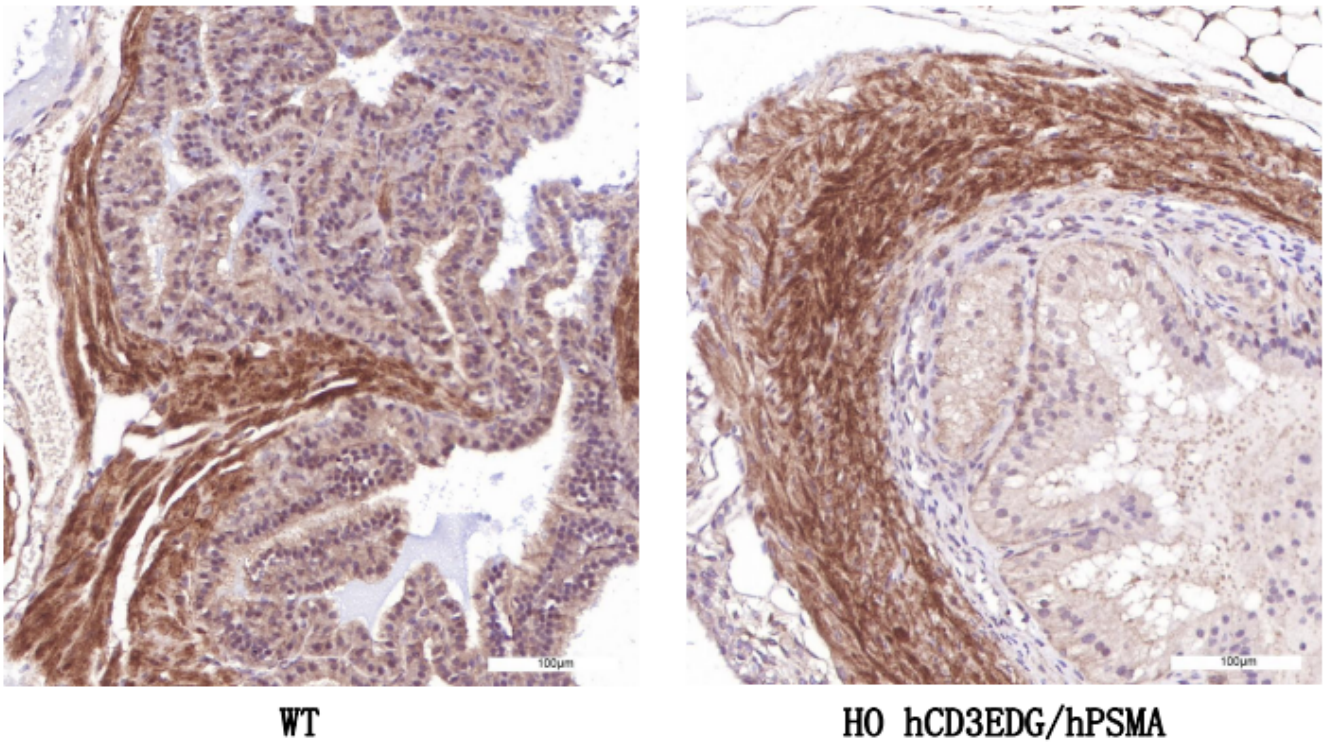


Fig3. Detection of human PSMA expression in Prostate by IHC.

Note. The human PSMA antibody cross-reacted with mouse PSMA and human PSMA. Abbr. HO, homozygous; HE, heterozygous; WT, wild type.

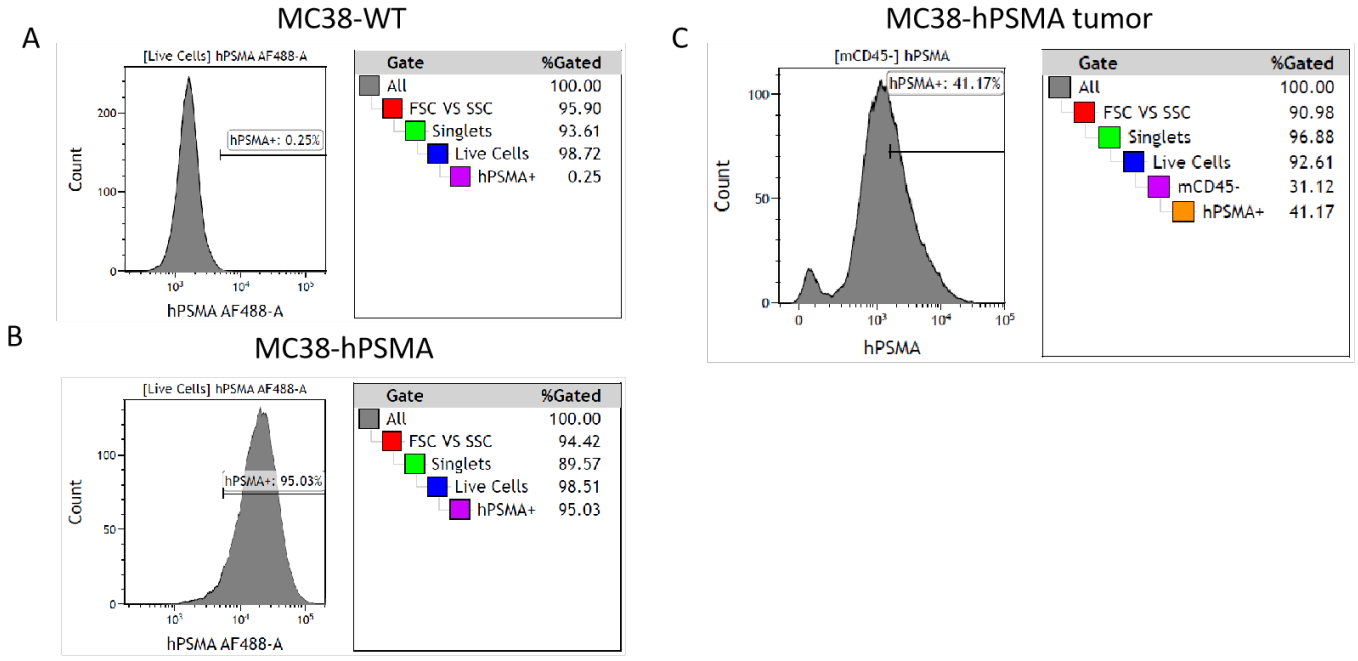


Fig4. Analysis of human PSMA expression in the MC38-hPSMA cell line and the transplanted tumor of the PSMA humanized mice by FACS. Most of the MC38-hPSMA cells express human PSMA (A,B); the transplanted tumor formed by MC38-hPSMA cell line expresses human PSMA on the CD45- cells (C).(Completed in collaboration with CrownBio)

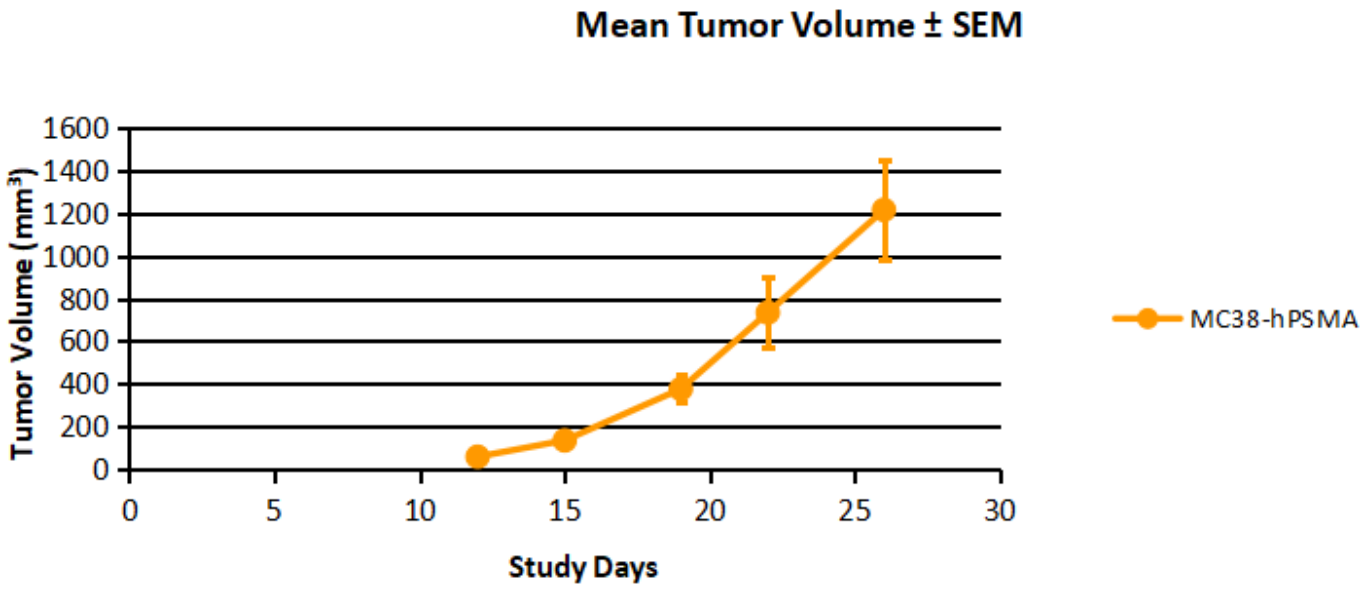


Fig5. Subcutaneous tumor formation experiment of the MC38-hPSMA cells in the PSMA humanized mice .The tumor volume was measured every 5 days after injection of MC38-hPSMA cells (n=10).The previous studies have shown that wild type mice would spontaneously reject the syngeneic tumors expressing an introduced human tumor antigen-hPSMA. While the MC38-hPSMA cells can form tumors subcutaneously in the humanized PSMA mice, indicating that the PSMA humanized mouse model can be used to transplant the MC38-hPSMA cell line.(Completed in collaboration with CrownBio)