

Pten-KO

Nomenclature	C57BL/6Smoc- <i>Pten</i> ^{em3Smoc}
Cat. NO.	NM-KO-18002
Strain State	Embryo cryopreservation

Gene Summary

Gene Symbol Pten	Synonyms	2310035007Rik A130070J02Rik B430203M17Rik MMAC1 TEP1
	NCBI ID	19211
	MGI ID	109583
	Ensembl ID	ENSMUSG00000013663
	Human Ortholog	PTEN

Model Description

Exon5 of Pten gene was deleted to generate Pten knockout mice.

Research Application: cancer research

*Literature published using this strain should indicate: Pten-KO mice (Cat. NO. NM-KO-18002) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Autism Spectrum Disorder	Phenotype(s)	MGI:5467729 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Slc6a4-KO(NM-KO-200892) mice.
	Reference(s)	Page DT, Kuti OJ, Prestia C, Sur M, Haploinsufficiency for Pten and Serotonin transporter cooperatively influences brain size and social behavior. Proc Natl Acad Sci U S A. 2009 Feb 10;106(6):1989-94

Prostate Cancer	Phenotype(s)	MGI:5569926 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Nkx3-1-KO(NM-KO-2112819) mice.
	Reference(s)	Kim MJ, Cardiff RD, Desai N, Banach-Petrosky WA, Parsons R, Shen MM, Abate-Shen C, Cooperativity of Nkx3.1 and Pten loss of function in a mouse model of prostate carcinogenesis. Proc Natl Acad Sci U S A. 2002 Mar 5;99(5):2884-9
Autism Spectrum Disorder	Phenotype(s)	MGI:5805821
	Reference(s)	Clipperton-Allen AE, Page DT, Decreased aggression and increased repetitive behavior in Pten haploinsufficient mice. Genes Brain Behav. 2015 Feb;14(2):145-57
Cowden Syndrome	Phenotype(s)	MGI:2179025
	Reference(s)	Di Cristofano A, Pesce B, Cordon-Cardo C, Pandolfi PP, Pten is essential for embryonic development and tumour suppression. Nat Genet. 1998 Aug;19(4):348-55

Validation Data

No data