

# Pten-KO

<b>Nomenclature</b>	C57BL/6Smoc- <i>Pten</i> <sup>em35moc</sup>
<b>Cat. NO.</b>	NM-KO-18002
<b>Strain State</b>	Embryo cryopreservation

## Gene Summary

<b>Gene Symbol</b> Pten	<b>Synonyms</b>	2310035007Rik A130070J02Rik B430203M17Rik MMAC1 TEP1
	<b>NCBI ID</b>	<a href="#">19211</a>
	<b>MGI ID</b>	<a href="#">109583</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000013663</a>
	<b>Human Ortholog</b>	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

<b>Autism Spectrum Disorder</b>	<b>Phenotype(s)</b>	<a href="#">MGI:5467729</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Slc6a4-KO(NM-KO-200892) mice.
	<b>Reference(s)</b>	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

<b>Prostate Cancer</b>	<b>Phenotype(s)</b>	<a href="#">MGI:5569926</a> Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Nkx3-1-KO(NM-KO-2112819) mice.
	<b>Reference(s)</b>	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
<b>Autism Spectrum Disorder</b>	<b>Phenotype(s)</b>	<a href="#">MGI:5805821</a>
	<b>Reference(s)</b>	Clipperton-Allen AE, Page DT, Decreased aggression and increased repetitive behavior in Pten haploinsufficient mice. Genes Brain Behav. 2015 Feb;14(2):145-57
<b>Cowden Syndrome</b>	<b>Phenotype(s)</b>	<a href="#">MGI:2179025</a>
	<b>Reference(s)</b>	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