Trp53-KO(2)

Nomenclature	C57BL/6Smoc-*Trp53*^{em5Smoc}
Cat. NO.	NM-KO-191203
Strain State	Embryo cryopreservation

Gene Summary

Gene Symbol **Trp53**	**Synonyms**	bbl; bfy; bhy; p44; p53; Tp53
	NCBI ID	22059
	MGI ID	98834
	Ensembl ID	ENSMUSG00000059552
	Human Ortholog	TRP53

Model Description

Exon 5-7 of Trp53 gene was deleted to generate Trp53 knockout mice.
Research Application: Cancer research
*Literature published using this strain should indicate: Trp53-KO(2) mice (Cat. NO. NM-KO-191203) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Medulloblastoma	**Phenotype(s)**	MGI:3818748 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Rag1-KO(NM-KO-2103089) and Xrcc5-KO(NM-KO-202153) mice.
	Reference(s)	Holcomb VB, Vogel H, Marple T, Kornegay RW, Hasty P, Ku80 and p53 suppress medulloblastoma that arise independent of Rag-1-induced DSBs. Oncogene. 2006 Nov 16;25(54):7159-65

Malignant Astrocytoma	**Phenotype(s)**	MGI:5286078 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Nf1-KO(NM-KO-210301) mice.
	Reference(s)	Reilly KM, Loisel DA, Bronson RT, McLaughlin ME, Jacks T, Nf1;Trp53 mutant mice develop glioblastoma with evidence of strain-specific effects. Nat Genet. 2000 Sep;26(1):109-13
Neurofibromatosis	**Phenotype(s)**	MGI:3580069 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Nf1-KO(NM-KO-210301) mice.
	Reference(s)	Vogel KS, Klesse LJ, Velasco-Miguel S, Meyers K, Rushing EJ, Parada LF, Mouse tumor model for neurofibromatosis type 1. Science. 1999 Dec 10;286(5447):2176-9
Medulloblastoma	**Phenotype(s)**	MGI:3710320 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Cdkn2C-KO(NM-KO-2114003) mice.
	Reference(s)	Uziel T, Zindy F, Xie S, Lee Y, Forget A, Magdaleno S, Rehg JE, Calabrese C, Solecki D, Eberhart CG, Sherr SE, Plimmer S, Clifford SC, Hatten ME, McKinnon PJ, Gilbertson RJ, Curran T, Sherr CJ, Roussel MF, The tumor suppressors Ink4c and p53 collaborate independently with Patched to suppress medulloblastoma formation. Genes Dev. 2005 Nov 15;19(22):2656-67
Diffuse Large B-Cell Lymphoma	**Phenotype(s)**	MGI:5014832
	Reference(s)	Slatter TL, Hung N, Campbell H, Rubio C, Mehta R, Renshaw P, Williams G, Wilson M, Engelmann A, Jeffs A, Royds JA, Baird MA, Braithwaite AW, Hyperproliferation, cancer, and inflammation in mice expressing a Delta133p53-like isoform. Blood. 2011 May 12;117(19):5166-77
Li-Fraumeni Syndrome	**Phenotype(s)**	MGI:2174783
	Reference(s)	Jacks T, Remington L, Williams BO, Schmitt EM, Halachmi S, Bronson RT, Weinberg RA, Tumor spectrum analysis in p53-mutant mice. Curr Biol. 1994 Jan 1;4(1):1-7

Li-Fraumeni syndrome	**Phenotype(s)**	MGI:3584464
	Reference(s)	Olive KP, Tuveson DA, Ruhe ZC, Yin B, Willis NA, Bronson RT, Crowley D, Jacks T, Mutant p53 gain of function in two mouse models of Li-Fraumeni syndrome. Cell. 2004 Dec 17;119(6):847-60

Validation Data

No data