Mecp2-Flox

Nomenclature	C57BL/6Smoc-*Mecp2*$^{tm2(flox)Smoc}$
Cat. NO.	NM-CKO-190001
Strain State	Repository Live

Gene Summary

Gene Symbol Mecp2	**Synonyms**	Mbd5，WBP10，1500041B07Rik，D630021H01Rik
	NCBI ID	17257
	MGI ID	99918
	Ensembl ID	ENSMUSG00000031393
	Human Ortholog	MECP2

Model Description

These mice carry loxP sites flanking exon 2-3. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of the gene.
Research Application：Rett syndrome, autism
*Literature published using this strain should indicate: Mecp2-Flox mice (Cat. NO. NM-CKO-190001) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Rett Syndrome	**Phenotype(s)**	MGI:3624680 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Nes-cre mice.
	Reference(s)	Chen RZ, Akbarian S, Tudor M, Jaenisch R, Deficiency of methyl-CpG binding protein-2 in CNS neurons results in a Rett-like phenotype in mice. Nat Genet. 2001 Mar;27(3):327-31

Rett syndrome	**Phenotype(s)**	MGI:6098756 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Chat-Cre mice.
	Reference(s)	Herrera JA, Ward CS, Wehrens XH, Neul JL, Methyl-CpG binding-protein 2 function in cholinergic neurons mediates cardiac arrhythmogenesis. Hum Mol Genet. 2016 Nov 15;25(22):4983-4995
Rett syndrome	**Phenotype(s)**	MGI:5306255 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Bdnf-Flox(NM-CKO-200064) and Camk2a-cre mice.
	Reference(s)	Chang Q, Khare G, Dani V, Nelson S, Jaenisch R, The disease progression of Mecp2 mutant mice is affected by the level of BDNF expression. Neuron. 2006 Feb 2;49(3):341-8

Validation Data

No data