Lmx1b-Flox

Nomenclature	C57BL/6Smoc-*Lmx1b*$^{em1(flox)Smoc}$
Cat. NO.	NM-CKO-200117
Strain State	Embryo cryopreservation

Gene Summary

Gene Symbol Lmx1b	**Synonyms**	Icst， LMX1.1， LMX1.2
	NCBI ID	16917
	MGI ID	1100513
	Ensembl ID	ENSMUSG00000038765
	Human Ortholog	LMX1B

Model Description

These mice carry loxP sites flanking exon 4-6 of Lmx1b gene. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of Lmx1b gene.

Research Application：Research on Dopaminergic Neurogenesis and Sudden Infant Death Syndrome (SIDS) Susceptibility Pathway

*Literature published using this strain should indicate: Lmx1b-Flox mice (Cat. NO. NM-CKO-200117) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Nail-Patella Syndrome	**Phenotype(s)**	MGI:3715141 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with NPHS2-cre mice.
	Reference(s)	Suleiman H, Heudobler D, Raschta AS, Zhao Y, Zhao Q, Hertting I, Vitzthum H, Moeller MJ, Holzman LB, Rachel R, Johnson R, Westphal H, Rascle A, Witzgall R, The podocyte-specific inactivation of Lmx1b, Ldb1 and E2a yields new insight into a transcriptional network in podocytes. Dev Biol. 2007 Apr 15;304(2):701-12

Parkinson's Disease	**Phenotype(s)**	MGI:5647883 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Lmx1a-Flox(NM-CKO-2114850) and Slc6a3-cre mice.
	Reference(s)	Laguna A, Schintu N, Nobre A, Alvarsson A, Volakakis N, Jacobsen JK, Gomez-Galan M, Sopova E, Joodmardi E, Yoshitake T, Deng Q, Kehr J, Ericson J, Svenningsson P, Shupliakov O, Perlmann T, Dopaminergic control of autophagic-lysosomal function implicates Lmx1b in Parkinson's disease. Nat Neurosci. 2015 Jun;18(6):826-35

Validation Data

No data