

Hif1a-Flox

Nomenclature	C57BL/6Smoc- <i>Hif1a</i> ^{tm1(flox)Smoc}
Cat. NO.	NM-CKO-190065
Strain State	Repository Live

Gene Summary

Gene Symbol Hif1a	Synonyms	MOP1, bHLHe78, AA959795, HIF1alpha, HIF1-alpha, HIF-1-alpha
	NCBI ID	15251
	MGI ID	106918
	Ensembl ID	ENSMUSG00000021109
	Human Ortholog	HIF1A

Model Description

These mice carry loxP sites flanking exon 2 of Hif1a gene. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of Hif1a gene.

Research Application: Hypoxia-inducible factor 1-alpha, Metabolism and cancer research

*Literature published using this strain should indicate: Hif1a-Flox mice (Cat. NO. NM-CKO-190065) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Von Hippel-Lindau Disease	Phenotype(s)	MGI:3621461 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Vhl-Flox(2)(NM-CKO-200232) and Pck1-cre mice.
	Reference(s)	Rankin EB, Higgins DF, Walisser JA, Johnson RS, Bradfield CA, Haase VH, Inactivation of the arylhydrocarbon receptor nuclear translocator (Arnt) suppresses von Hippel-Lindau disease-associated vascular tumors in mice. Mol Cell Biol. 2005 Apr;25(8):3163-72
Glycogen Storage Disease Vii	Phenotype(s)	MGI:3621470 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Ckmm-cre mice.
	Reference(s)	Mason SD, Howlett RA, Kim MJ, Olfert IM, Hogan MC, McNulty W, Hickey RP, Wagner PD, Kahn CR, Giordano FJ, Johnson RS, Loss of skeletal muscle HIF-1alpha results in altered exercise endurance. PLoS Biol. 2004 Oct;2(10):e288

Validation Data

No data