Gba-Flox

Nomenclature	C57BL/6Smoc-*Gba*$^{em2(flox)Smoc}$
Cat. NO.	NM-CKO-200051
Strain State	Developing

Gene Summary

Gene Symbol **Gba**	**Synonyms**	GC; GBA1; GLUC; GCase; betaGC
	NCBI ID	14466
	MGI ID	95665
	Ensembl ID	ENSMUSG00000028048
	Human Ortholog	GBA

Model Description

These mice carry loxP sites flanking exon 8-11 of Gba gene. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of Gba gene.While Gba-Flox(2)(Stock No.NM-CKO-200179） mice carrying the loxP sites flanking exon 6-8 of Gba gene.

Research Application： Gaucher disease research

*Literature published using this strain should indicate: Gba-Flox mice (Cat. NO. NM-CKO-200051) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Gaucher's Disease Type I	**Phenotype(s)**	MGI:3699178 Note： The expected phenotype(s) may be observed in the above-mentioned mice that bred with Tek-cre mice.
	Reference(s)	Sinclair GB, Jevon G, Colobong KE, Randall DR, Choy FY, Clarke LA, Generation of a conditional knockout of murine glucocerebrosidase: Utility for the study of Gaucher disease. Mol Genet Metab. 2007 Feb;90(2):148-56

Gaucher's disease type I	**Phenotype(s)**	MGI:3688418 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Mx1-cre mice.
	Reference(s)	Enquist IB, Nilsson E, Ooka A, Mansson JE, Olsson K, Ehinger M, Brady RO, Richter J, Karlsson S, Effective cell and gene therapy in a murine model of Gaucher disease. Proc Natl Acad Sci U S A. 2006 Sep 12;103(37):13819-24
Gaucher's disease type I	**Phenotype(s)**	MGI:4867688 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Mx1-cre mice.
	Reference(s)	Mistry PK, Liu J, Yang M, Nottoli T, McGrath J, Jain D, Zhang K, Keutzer J, Chuang WL, Mehal WZ, Zhao H, Lin A, Mane S, Liu X, Peng YZ, Li JH, Agrawal M, Zhu LL, Blair HC, Robinson LJ, Iqbal J, Sun L, Zaidi M, Glucocerebrosidase gene-deficient mouse recapitulates Gaucher disease displaying cellular and molecular dysregulation beyond the macrophage. Proc Natl Acad Sci U S A. 2010 Nov 9;107(45):19473-8
Gaucher's Disease	**Phenotype(s)**	MGI:4867688 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Mx1-cre mice.
	Reference(s)	Mistry PK, et al., Glucocerebrosidase gene-deficient mouse recapitulates Gaucher disease displaying cellular and molecular dysregulation beyond the macrophage. Proc Natl Acad Sci U S A. 2010 Nov 9;107(45):19473-8
Gaucher's Disease Type Ii	**Phenotype(s)**	MGI:3764515 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with KRT14-cre mice.
	Reference(s)	Enquist IB, Bianco CL, Ooka A, Nilsson E, Mansson JE, Ehinger M, Richter J, Brady RO, Kirik D, Karlsson S, Murine models of acute neuronopathic Gaucher disease. Proc Natl Acad Sci U S A. 2007 Oct 30;104(44):17483-8

Validation Data

No data