Cox10-Flox

Nomenclature	C57BL/6Smoc-*Cox10*$^{em1(flox)Smoc}$
Cat. NO.	NM-CKO-240103
Strain State	Developing

Gene Summary

Gene Symbol Cox10	**Synonyms**	AU042636; 2410004F01Rik
	NCBI ID	70383
	MGI ID	1917633
	Ensembl ID	ENSMUSG00000042148
	Human Ortholog	COX10

Model Description

These strains carry loxP sites flanking exon 6 of Cox10 gene. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of Cox10 gene.
*Literature published using this strain should indicate: Cox10-Flox mice (Cat. NO. NM-CKO-240103) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Parkinson's Disease	**Phenotype(s)**	MGI:5775427 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Slc6a3-cre mice.
	Reference(s)	Pinto M, Nissanka N, Peralta S, Brambilla R, Diaz F, Moraes CT, Pioglitazone ameliorates the phenotype of a novel Parkinson's disease mouse model by reducing neuroinflammation. Mol Neurodegener. 2016;11:25

Mitochondrial Myopathy	**Phenotype(s)**	MGI:3609951 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Myl1-Cre mice.
	Reference(s)	Diaz F, Thomas CK, Garcia S, Hernandez D, Moraes CT, Mice lacking COX10 in skeletal muscle recapitulate the phenotype of progressive mitochondrial myopathies associated with cytochrome c oxidase deficiency. Hum Mol Genet. 2005 Sep 15;14(18):2737-48
Cytochrome-C Oxidase Deficiency Disease	**Phenotype(s)**	MGI:5444474 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Camk2a-cre mice.
	Reference(s)	Diaz F, Garcia S, Padgett KR, Moraes CT, A defect in the mitochondrial complex III, but not complex IV, triggers early ROS-dependent damage in defined brain regions. Hum Mol Genet. 2012 Dec 1;21(23):5066-77

Validation Data

No data