Nos3-KO

Nomenclature	C57BL/6Smoc-*Nos3*^{em1Smoc}
Cat. NO.	NM-KO-18022
Strain State	Repository Live

Gene Summary

Gene Symbol **Nos3**	**Synonyms**	eNOS; Nos-3; ecNOS; 2310065A03Rik
	NCBI ID	18127
	MGI ID	97362
	Ensembl ID	ENSMUSG00000028978
	Human Ortholog	NOS3

Model Description

Exon10-11 of B2m gene were deleted to generate B2m knockout mice.
*Literature published using this strain should indicate: Nos3-KO mice (Cat. NO. NM-KO-18022) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Hypertrophic Cardiomyopathy	**Phenotype(s)**	MGI:4367213 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Nos1-KO(NM-KO-2111954) mice.
	Reference(s)	Barouch LA, Cappola TP, Harrison RW, Crone JK, Rodriguez ER, Burnett AL, Hare JM, Combined loss of neuronal and endothelial nitric oxide synthase causes premature mortality and age-related hypertrophic cardiac remodeling in mice. J Mol Cell Cardiol. 2003 Jun;35(6):637-44

Nephrogenic Diabetes Insipidus	**Phenotype(s)**	MGI:3789190 Note：The expected phenotype(s) may be observed in the above-mentioned mice that bred with Nos1-KO(NM-KO-2111954) and Nos2-KO(NM-KO-18022) mice.
	Reference(s)	Morishita T, Tsutsui M, Shimokawa H, Sabanai K, Tasaki H, Suda O, Nakata S, Tanimoto A, Wang KY, Ueta Y, Sasaguri Y, Nakashima Y, Yanagihara N, Nephrogenic diabetes insipidus in mice lacking all nitric oxide synthase isoforms. Proc Natl Acad Sci U S A. 2005 Jul 26;102(30):10616-21
Essential Hypertension	**Phenotype(s)**	MGI:2174979
	Reference(s)	Huang PL, Huang Z, Mashimo H, Bloch KD, Moskowitz MA, Bevan JA, Fishman MC, Hypertension in mice lacking the gene for endothelial nitric oxide synthase [see comments]. Nature. 1995 Sep 21;377(6546):239-42
Persistent Fetal Circulation Syndrome	**Phenotype(s)**	MGI:3618597
	Reference(s)	Han RN, Babaei S, Robb M, Lee T, Ridsdale R, Ackerley C, Post M, Stewart DJ, Defective lung vascular development and fatal respiratory distress in endothelial NO synthase-deficient mice: a model of alveolar capillary dysplasia?. Circ Res. 2004 Apr 30;94(8):1115-23

Validation Data

No data