

Nos1-KO

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| Nomenclature | C57BL/6Smoc- <i>Nos1</i> ^{em1Smoc} |
| Cat. NO. | NM-KO-240406 |
| Strain State | Developing |

Gene Summary

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| Gene Symbol Nos1 | Synonyms | NO; NOS; bNOS; nNOS; N-NOS; NOS-I; Nos-1; NC-NOS; 2310005C01Rik |
| | NCBI ID | 18125 |
| | MGI ID | 97360 |
| | Ensembl ID | ENSMUSG00000029361 |
| | Human Ortholog | NOS1 |

Model Description

The exon 1 of *Nos1* gene was deleted to generate *Nos1* knockout mouse.

*Literature published using this strain should indicate: *Nos1*-KO mice (Cat. NO. NM-KO-240406) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

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| Hypertrophic Cardiomyopathy | Phenotype(s) | MGI:4367213 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with <i>Nos3</i> -KO(NM-KO-18022) 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. <i>J Mol Cell Cardiol.</i> 2003 Jun;35(6):637-44 |

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| Nephrogenic Diabetes Insipidus | Phenotype(s) | MGI:3789190 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Nos2-KO(NM-KO-18027) and Nos3-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 |
| Achalasia | Phenotype(s) | MGI:3618910 |
| | Reference(s) | Sivarao DV, Mashimo HL, Thatte HS, Goyal RK, Lower esophageal sphincter is achalasic in nNOS(-/-) and hypotensive in W/W(v) mutant mice. Gastroenterology. 2001 Jul;121(1):34-42 |
| Hypertrophic Pyloric Stenosis | Phenotype(s) | MGI:2174975 |
| | Reference(s) | Huang PL, Dawson TM, Bredt DS, Snyder SH, Fishman MC, Targeted disruption of the neuronal nitric oxide synthase gene. Cell. 1993 Dec 31;75(7):1273-86 |

Validation Data

No data