

Dicer1-Flox

Nomenclature	C57BL/6Smoc- <i>Dicer1</i> ^{em1(flox)Smoc}
Cat. NO.	NM-CKO-200158
Strain State	Sperm cryopreservation

Gene Summary

Gene Symbol Dicer1	Synonyms	D12Ertd7e; mKIAA0928; 1110006F08Rik
	NCBI ID	192119
	MGI ID	2177178
	Ensembl ID	ENSMUSG00000041415
	Human Ortholog	DICER1

Model Description

These mice carry loxP sites flanking exon 23 of Dicer1 gene. When crossed with a Cre recombinase-expressing strain, this strain is useful in eliminating tissue-specific conditional expression of Dicer1 gene.

Research Application: Hypoxia-mediated EMT, stem and gene expression related research

*Literature published using this strain should indicate: Dicer1-Flox mice (Cat. NO. NM-CKO-200158) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Ovarian Cancer	Phenotype(s)	MGI:5704370 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Pten-Flox(NM-CKO-18004), P53-Flox(2)(NM-CKO-190067) and Amhr2-Cre mice.
	Reference(s)	Kim J, Coffey DM, Ma L, Matzuk MM, The ovary is an alternative site of origin for high-grade serous ovarian cancer in mice. Endocrinology. 2015 Jun;156(6):1975-81

ovarian cancer	Phenotype(s)	MGI:5704363 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Pten-Flox(NM-CKO-18004) and Amhr2-Cre mice.
	Reference(s)	Kim J, Coffey DM, Creighton CJ, Yu Z, Hawkins SM, Matzuk MM, High-grade serous ovarian cancer arises from fallopian tube in a mouse model. Proc Natl Acad Sci U S A. 2012 Mar 6;109(10):3921-6
Squamous Cell Carcinoma	Phenotype(s)	MGI:5618123 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with P53-Flox(2)(NM-CKO-190067) and KRT5-cre/PGR mice.
	Reference(s)	Lyle S, Hoover K, Colpan C, Zhu Z, Matijasevic Z, Jones SN, Dicer cooperates with p53 to suppress DNA damage and skin carcinogenesis in mice. PLoS One. 2014;9(6):e100920
Dilated Cardiomyopathy	Phenotype(s)	MGI:5906349 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Myh6-cre mice.
	Reference(s)	Chen JF, Murchison EP, Tang R, Callis TE, Tatsuguchi M, Deng Z, Rojas M, Hammond SM, Schneider MD, Selzman CH, Meissner G, Patterson C, Hannon GJ, Wang DZ, Targeted deletion of Dicer in the heart leads to dilated cardiomyopathy and heart failure. Proc Natl Acad Sci U S A. 2008 Feb 12;105(6):2111-6

Validation Data

No data