

Mc4r-KO(2)

系統名	C57BL/6Smoc- <i>Mc4r</i> ^{em1Smoc}
SMOC番号	NM-KO-205021
維持形態	Embryo cryopreservation

遺伝子の概要

Gene Symbol Mc4r	Synonyms	Pkcp; Mc4-r
	NCBI ID	17202
	MGI ID	99457
	Ensembl ID	ENSMUSG00000047259
	Human Ortholog	MC4R

説明

exon 1 of Mc4r gene was deleted to generate Mc4r knockout mice via CRISPR/Cas9 mediated recombination.

*Literature published using this strain should indicate: Mc4r-KO(2) mice (Cat. NO. NM-KO-205021) were purchased from Shanghai Model Organisms Center, Inc..

病気の予測

Obesity	表現型	MGI:3850836 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Mc3r-KO(NM-KO-190652) mice.
	参考文献	Chen AS, Marsh DJ, Trumbauer ME, Frazier EG, Guan XM, Yu H, Rosenblum CI, Vongs A, Feng Y, Cao L, Metzger JM, Strack AM, Camacho RE, Mellin TN, Nunes CN, Min W, Fisher J, Gopal-Truter S, MacIntyre DE, Chen HY, Van Der Ploeg LH, Inactivation of the mouse melanocortin-3 receptor results in increased fat mass and reduced lean body mass. Nat Genet. 2000 Sep;26(1):97-102

Non-Alcoholic Steatohepatitis	表現型	MGI:6405042
	参考文献	Matsumoto M, Yashiro H, Ogino H, Aoyama K, Nambu T, Nakamura S, Nishida M, Wang X, Erion DM, Kaneko M, Acetyl-CoA carboxylase 1 and 2 inhibition ameliorates steatosis and hepatic fibrosis in a MC4R knockout murine model of nonalcoholic steatohepatitis. PLoS One. 2020;15(1):e0228212
Obesity	表現型	MGI:3579026
	参考文献	Huszar D, Lynch CA, Fairchild-Huntress V, Dunmore JH, Fang Q, Berkemeier LR, Gu W, Kesterson RA, Boston BA, Cone RD, Smith FJ, Campfield LA, Burn P, Lee F, Targeted disruption of the melanocortin-4 receptor results in obesity in mice. Cell. 1997 Jan 10;88(1):131-41

表現型データ

No data