Zmpste24-KO

Nomenclature	C57BL/6Smoc-*Zmpste24*^{em1Smoc}
Cat. NO.	NM-KO-18011
Strain State	Embryo cryopreservation

Gene Summary

Gene Symbol **Zmpste24**	**Synonyms**	MADB; FACE1; STE24; Face-1; Ste24p; D030046F19; A530043O15Rik
	NCBI ID	230709
	MGI ID	1890508
	Ensembl ID	ENSMUSG00000043207
	Human Ortholog	ZMPSTE24

Model Description

敲除Zmpste24基因exon4-6，建立Zmpste24基因敲除小鼠模型。曾有基因修饰致死报导，详情点击基因信息中的MGI ID。

Research Application：早衰模型

*Literature published using this strain should indicate: Zmpste24-KO mice (Cat. NO. NM-KO-18011) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

贲门失弛缓症 **Achalasia**	**Phenotype(s)**	MGI:5754490 Note：该品系需与Lmna-KO(NM-K0-210380)交配才可能获得预期表型
	Reference(s)	Yang SH, Procaccia S, Jung HJ, Nobumori C, Tatar A, Tu Y, Bayguinov YR, Hwang SJ, Tran D, Ward SM, Fong LG, Young SG, Mice that express farnesylated versions of prelamin A in neurons develop achalasia. Hum Mol Genet. 2015 May 15;24(10):2826-40

家族性部分脂肪营养不良 Familial Partial Lipodystrophy	**Phenotype(s)**	MGI:3621007
	Reference(s)	Pendas AM, Zhou Z, Cadinanos J, Freije JM, Wang J, Hultenby K, Astudillo A, Wernerson A, Rodriguez F, Tryggvason K, Lopez-Otin C, Defective prelamin A processing and muscular and adipocyte alterations in Zmpste24 metalloproteinase-deficient mice. Nat Genet. 2002 May;31(1):94-9
早衰 Progeria	**Phenotype(s)**	MGI:3620907
	Reference(s)	Fong LG, Ng JK, Meta M, Cote N, Yang SH, Stewart CL, Sullivan T, Burghardt A, Majumdar S, Reue K, Bergo MO, Young SG, Heterozygosity for Lmna deficiency eliminates the progeria-like phenotypes in Zmpste24-deficient mice. Proc Natl Acad Sci U S A. 2004 Dec 28;101(52):18111-6

Validation Data

No data