Myf5-Cre

Nomenclature	C57BL/6Smoc- <i>Myf5</i> ^{em1(Cre-WPRE-polyA)Smoc}	
Cat. NO.	NM-KI-200147	
Strain State	Sperm cryopreservation	

Gene Summary

Gene Symbol Myf5	Synonyms	Myf-5; bHLHc2; B130010J22Rik
	NCBI ID	<u>17877</u>
	MGI ID	<u>97252</u>
	Ensembl ID	ENSMUSG000000435
	Human Ortholog	MYF5

Model Description

A Cre-WPRE-polyA expression cassette was knocked into the Myf5 gene start codon site. Myogenic factor 5 (Myf5) belongs to the MRF family transcription factors that regulate myogenesis. It is expressed in the skeletal muscle and satellite cells. Severe loss of skeletal muscle following ablation of Myf5-expressing progenitors. This strain is useful in studying the differentiation of skeletal muscle.

Research Application: Cre recombinase tool

*Literature published using this strain should indicate: Myf5-Cre mice (Cat. NO. NM-KI-200147) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data





Merged

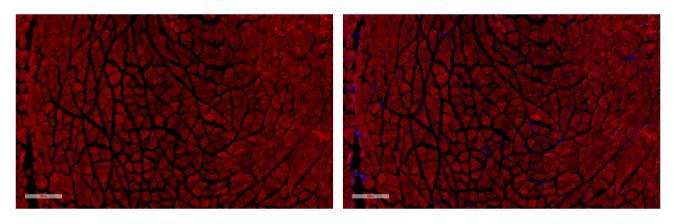


Fig. 1 Cre-mediated recombination in the skeletal muscle of Myf5^{Cre/+}; Rosa26^{tdTomato/+} mouse. TdTomato(red) expression can be detected in the muscle cells of Myf5^{Cre/+}; Rosa26^{tdTomato/+} mouse.

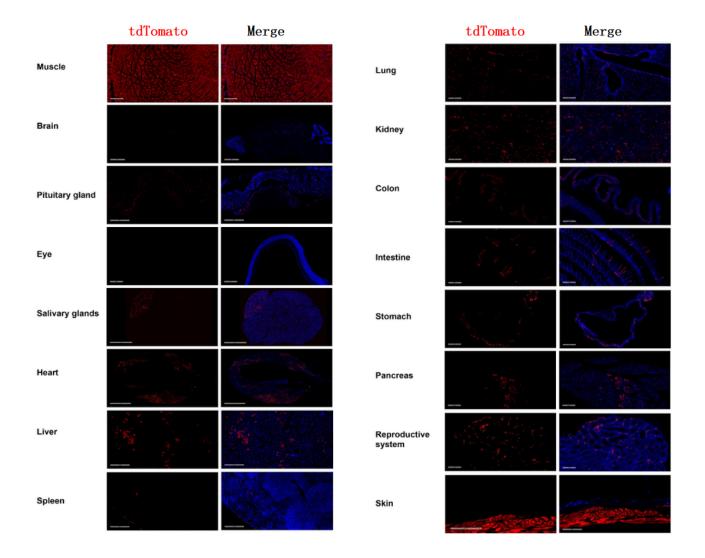


Fig. 2 Detection of tdTomato(red) in various tissues of Myf5^{Cre/+}; Rosa26^{tdTomato/+} mice. Tdtomato was expressed in the skeletal muscle. TdTomato can also be detected in individual cells of the brain, pituitary gland, eyes, salivary gland, heart, liver, spleen, lung, kidney, colon, intestine, stomach, pancreas, reproductive system and skin. (For more detailed information please contact



our technical advisor.)