

Pax7-IRES-Cre

Nomenclature	C57BL/6Smoc- <i>Pax7</i> ^{em1(IRES-iCre)Smoc}
Cat. NO.	NM-KI-200120
Strain State	Embryo cryopreservation

Gene Summary

Gene Symbol Pax7	Synonyms	Pax-7
	NCBI ID	18509
	MGI ID	97491
	Ensembl ID	ENSMUSG00000028736
	Human Ortholog	PAX7

Model Description

A IRES-iCre expression cassette was knocked into the Pax7 gene stop codon site. Pax7 is expressed in myogenic progenitor cells. Pax7 is essential for the myogenic potential, survival, and proliferation of myogenic progenitors. When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in cells expressing Pax7.

Research Application: Cre recombinase tool

*Literature published using this strain should indicate: Pax7-IRES-Cre mice (Cat. NO. NM-KI-200120) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

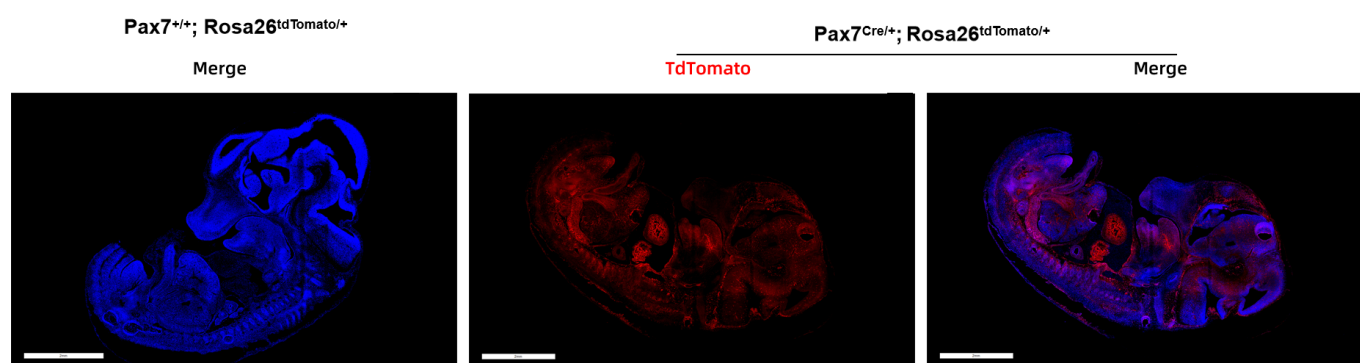


Fig. 1 Cre-mediated recombination in the embryo of Pax7^{Cre/+}; Rosa26^{tdTomato/+} mouse.

TdTomato(red) expression can be detected in the E12.5 Pax7^{Cre/+}; Rosa26^{tdTomato/+} mouse embryo.

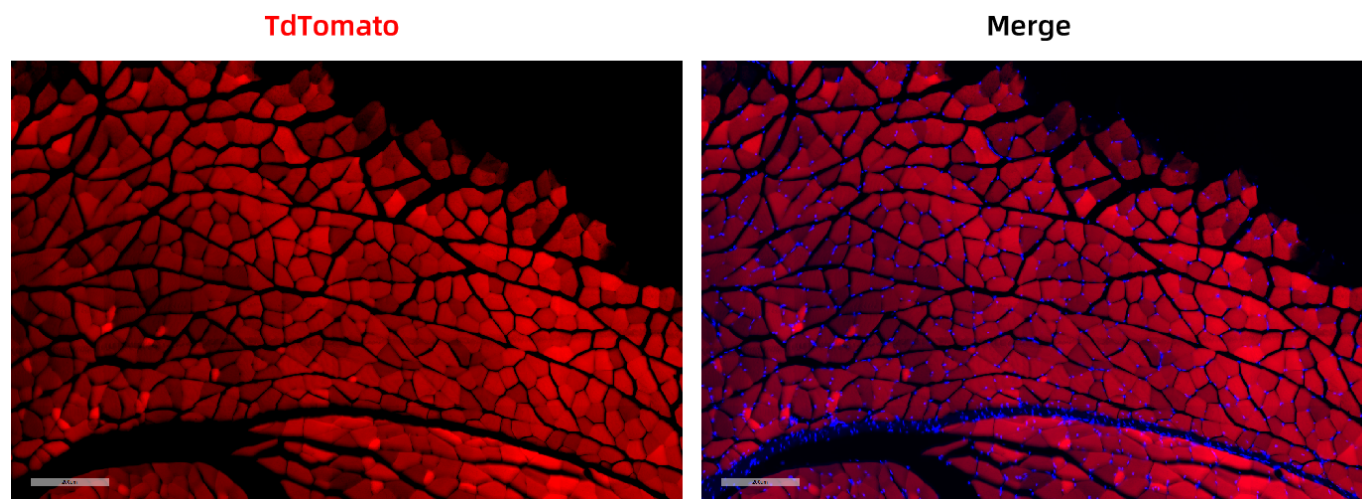


Fig. 2 Cre-mediated recombination in the skeletal muscle of Pax7^{Cre/+}; Rosa26^{tdTomato/+} mouse. TdTomato(red) expression can be detected in the skeletal muscle cells of Pax7^{Cre/+}; Rosa26^{tdTomato/+} mouse.

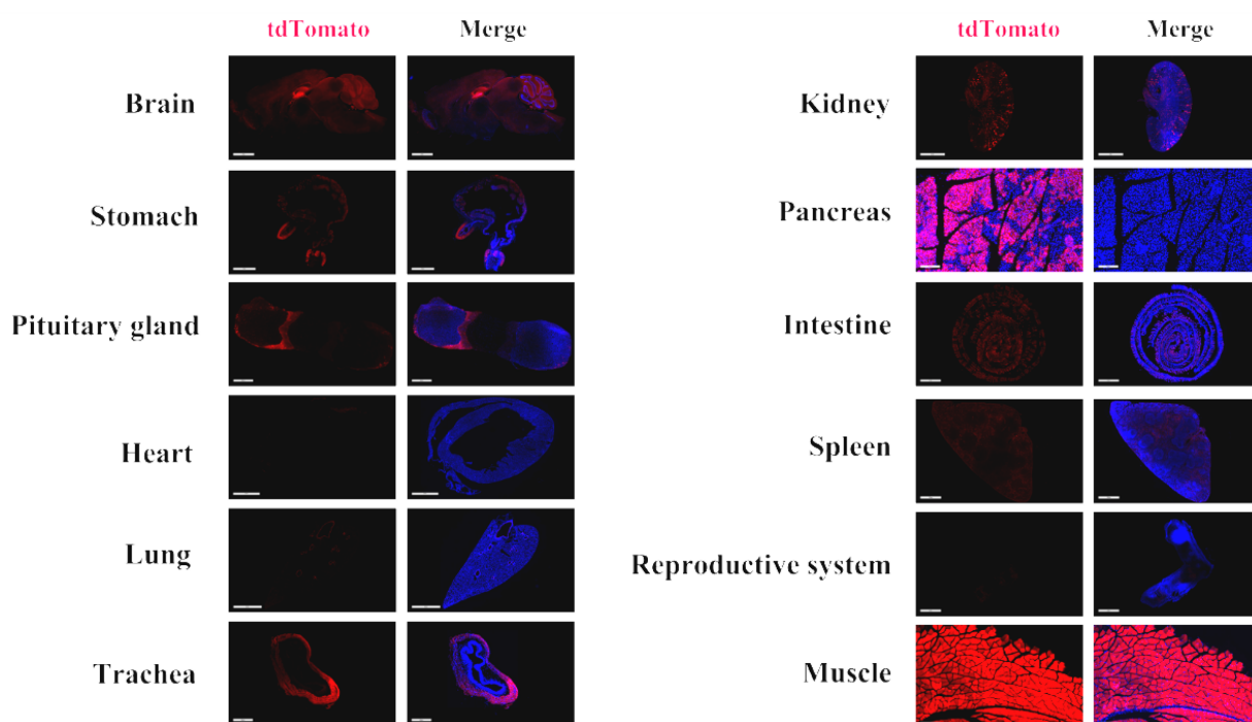


Fig. 3 Detection of tdTomato(red) in various tissues of Pax7^{Cre/+}; Rosa26^{tdTomato/+} mice. Tdtomato expression can be detected in the hippocampus, cerebellum, gastric mucosa, trachea, bronchi, the muscular layer outside the trachea and intestine. Tdtomato expression can also be detected in individual cells of the pituitary gland, kidney, pancreas, spleen and uterus. (For more detailed information please contact our technical advisor.)

