

Pax7-IRES-CreERT2

Nomenclature	C57BL/6Smoc- <i>Pax7</i> ^{em1(IRES-Cre-ERT2)Smoc}
Cat. NO.	NM-KI-200099
Strain State	Repository Live

Gene Summary

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

Model Description

A IRES-Cre-ERT2 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 after tamoxifen treatment.

Research Application: Cre recombinase tool

*Literature published using this strain should indicate: Pax7-IRES-CreERT2 mice (Cat. NO. NM-KI-200099) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

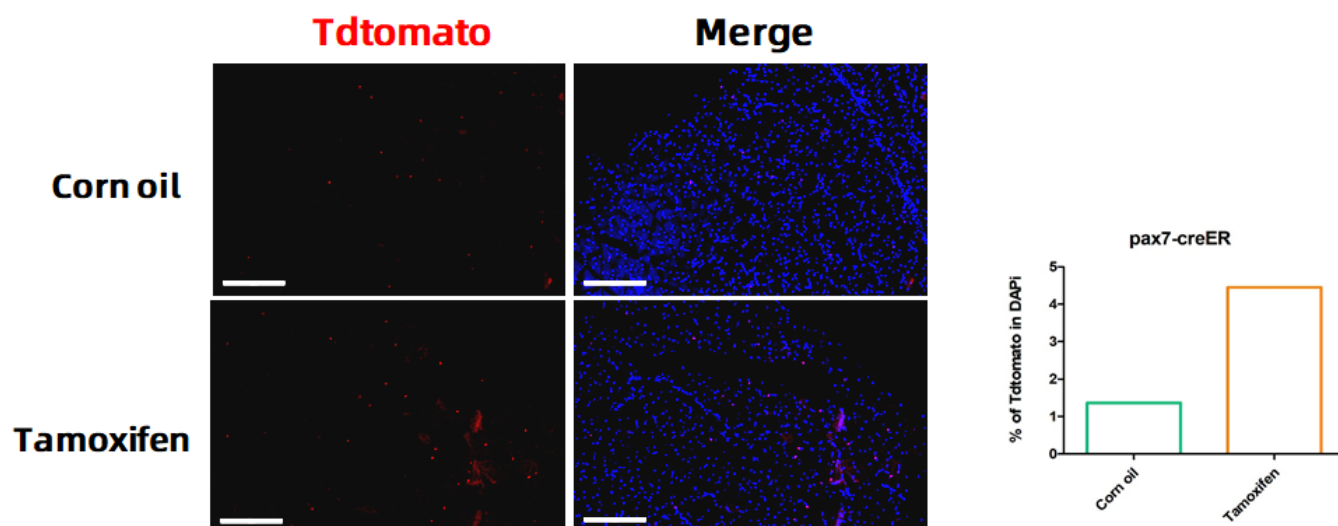


Fig. 1 CreERT2-mediated recombination in the muscle of Pax7CreERT2/+; Rosa26tdTomato/+ mouse. TdTomato(red) expression can be detected in the muscle satellite cells of Pax7CreERT2/+; Rosa26tdTomato/+ mouse after tamoxifen treatment. Some leakiness were detected prior to tamoxifen exposure.

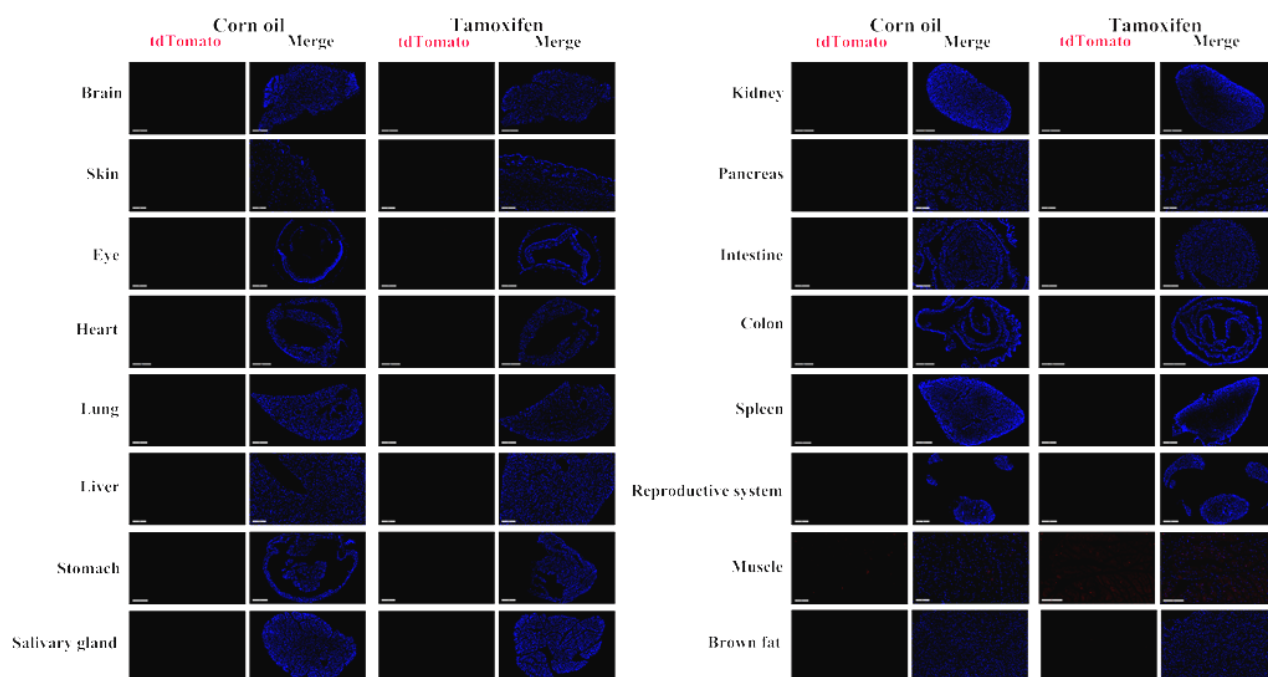


Fig. 2 Detection of tdTomato(red) in various tissues of Pax7CreERT2/+; Rosa26tdTomato/+ mice. Tdtomato can not be detected in the brain, colon, eye, heart, intestine, kidney, lung, liver, pancreas, stomach, spleen, skin, salivary gland, testis or epididymis. (For more detailed information please contact our technical advisor.)

