

Ptf1a-CreERT2

Nomenclature	C57BL/6Smoc- <i>Ptf1a</i> ^{em1(CreERT2-WPRE-pA)Smoc}
Cat. NO.	NM-KI-200118
Strain State	Repository Live

Gene Summary

Gene Symbol Ptf1a	Synonyms	PTF1p48; bHLHa29; PTF1-p48
	NCBI ID	19213
	MGI ID	1328312
	Ensembl ID	ENSMUSG00000026735
	Human Ortholog	PTF1A

Model Description

A CreERT2-WPRE-pA expression cassette was knocked into the Ptf1a gene start codon site.

Research Application: These mice express cre recombinase from the Ptf1a locus. By mating the reporter mice with CreERT2-expressing mice, reporter gene expression can be detected in the pancreatic acinar cells of the Ptf1aCreERT2/+ ; Rosa26tdTomato/+ mouse. And the mice are useful for generating conditional mutations in pancreatic acinar cells. This strain may be useful for in the research of pancreatic cancer.

*Literature published using this strain should indicate: Ptf1a-CreERT2 mice (Cat. NO. NM-KI-200118) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

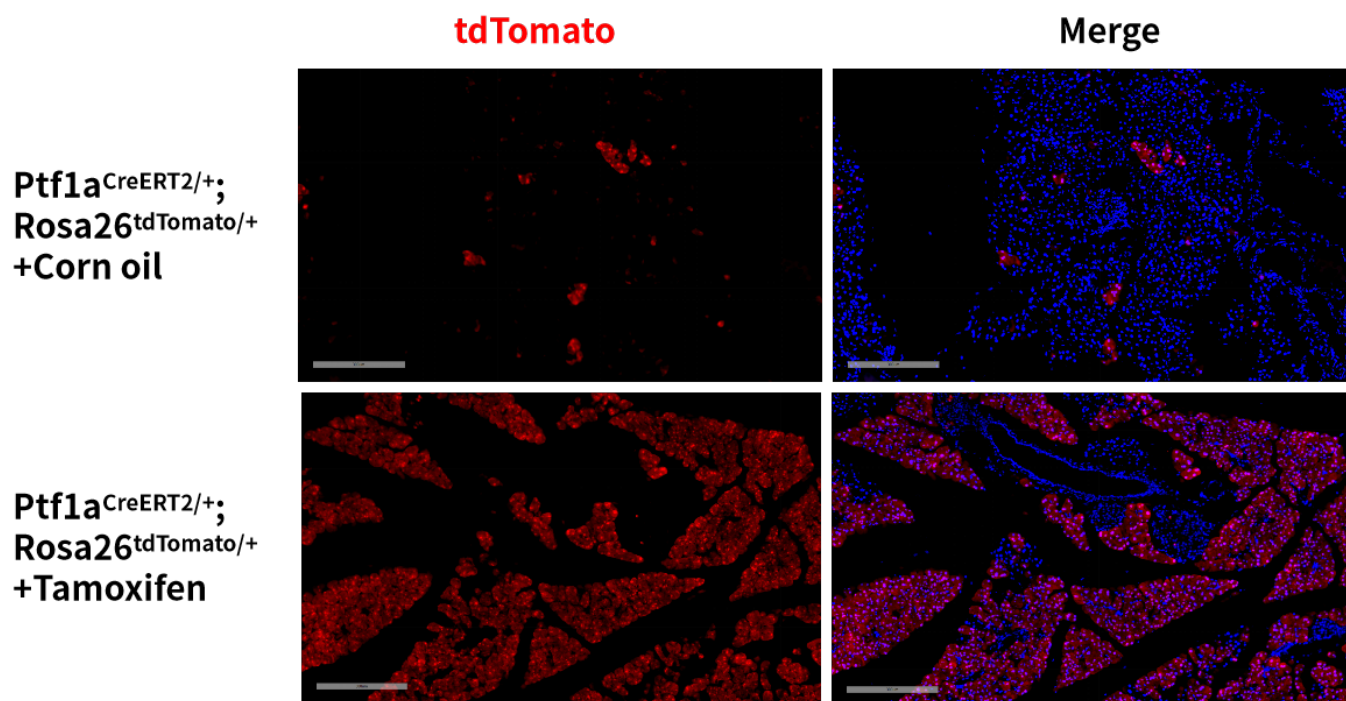


Fig.1 CreERT2-mediated recombination in the pancreas of Ptf1a^{CreERT2/+} ; Rosa26^{tdTomato/+} mouse.

TdTomato(red) expression can be detected in the pancreatic acinar cells of Ptf1a^{CreERT2/+};
Rosa26^{tdTomato/+} mouse after tamoxifen treatment.

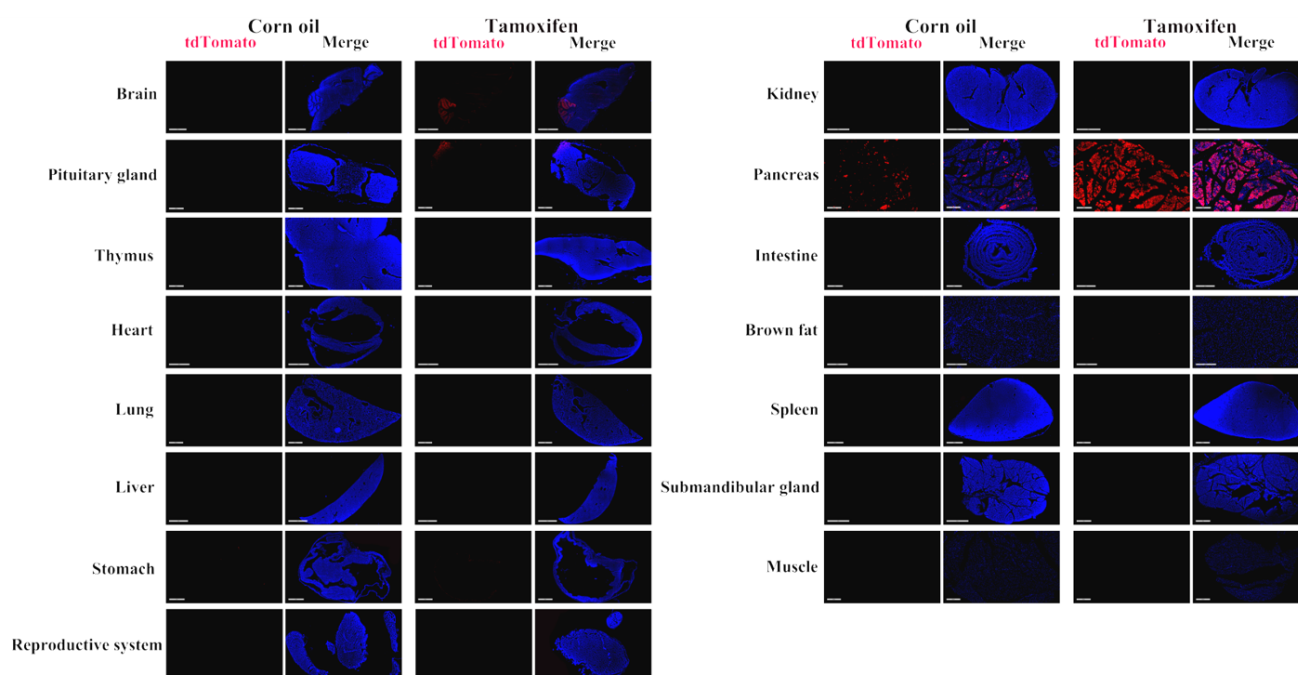


Fig.2 Detection of tdTomato (red) in various tissues of Ptf1a^{CreERT2/+} ; Rosa26^{tdTomato/+} mice after tamoxifen treatment.

CreERT2-mediated recombination in the pancreatic acinar cells can be induced by tamoxifen. Some leakiness were detected in the pancreas prior to tamoxifen exposure. Besides, tdtomato

expression can be detected in a few cells of the brain, pituitary gland and stomach. Tdtomato exprssion can not be detected in thymus, heart, lung, liver, testis, kidney, intestine, brown fat, spleen, submandibular gland, and muscle. (For more detailed information please contact our technical advisor.)
