

Ptf1a-CreERT2

系統名	C57BL/6Smoc- <i>Ptf1a</i> ^{em1(CreERT2-WPRE-pA)Smoc}
SMOC番号	NM-KI-200118
維持形態	Repository Live

遺伝子の概要

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

説明

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

応用分野: 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..

表現型データ

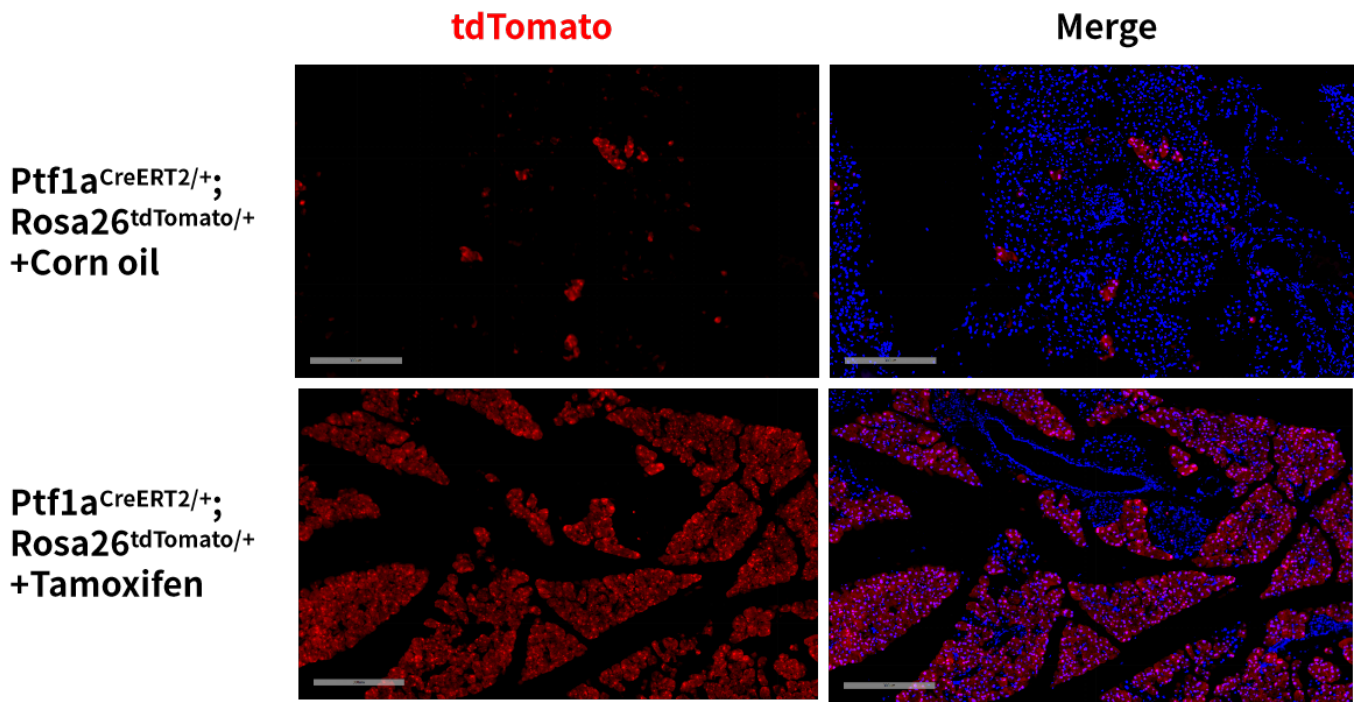


Fig.1 CreERT2-mediated recombination in the pancreas of $Ptf1a^{CreERT2/+}$; $Rosa26^{tdTomato/+}$ mouse.

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

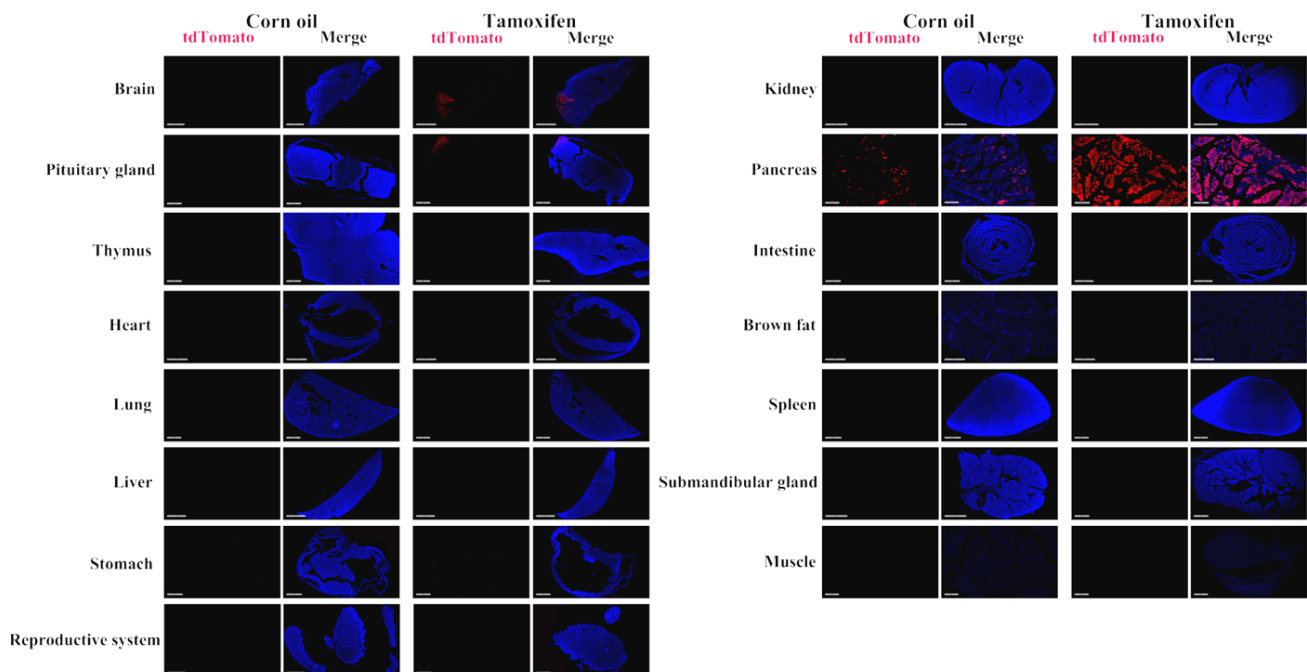


Fig.2 Detection of tdTomato (red) in various tissues of $Ptf1a^{CreERT2/+}$; $Rosa26^{tdTomato/+}$ mice after tamoxifen treatment.

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.)
