Prom1-CreERT2

Nomenclature	C57BL/6Smoc-*Prom1*$^{em1(CreERT2-PolyA)Smoc}$
Cat. NO.	NM-KI-200169
Strain State	Sperm cryopreservation

Gene Summary

Gene Symbol **Prom1**	**Synonyms**	Prom; AC133; CD133; Prom-1; Proml1; 4932416E19Rik
	NCBI ID	19126
	MGI ID	1100886
	Ensembl ID	ENSMUSG00000029086
	Human Ortholog	PROM1

Model Description

A CreERT2-PolyA expression cassette was knocked into the Prom1 gene start codon site. Prom1 encodes a pentaspan transmembrane glycoprotein. The protein localizes to membrane protrusions and is often expressed on adult stem cells, where it is thought to function in maintaining stem cell properties by suppressing differentiation. When these Prom1-CreERT2 mice are bred with mice containing a loxP-flanked sequence of interest, tamoxifen-inducible, Cre-mediated recombination will result in deletion of the flanked sequences in Prom1 expressing cells.

Research Application: Cre recombinase tool; Stem cell

*Literature published using this strain should indicate: Prom1-CreERT2 mice (Cat. NO. NM-KI-200169) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

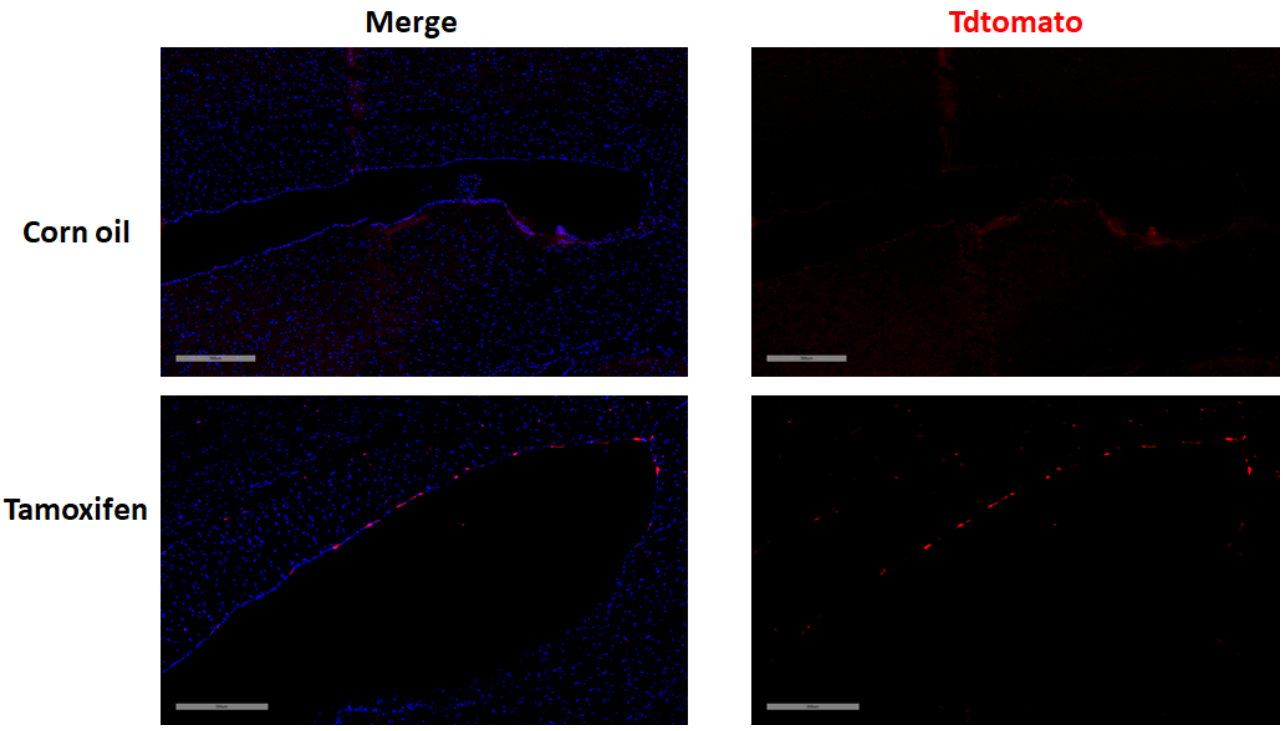

Fig. 1 CreERT2-mediated recombination in the third ventricle of Prom1-CreERT2; Rosa26-tdTomato mice after tamoxifen treatment.

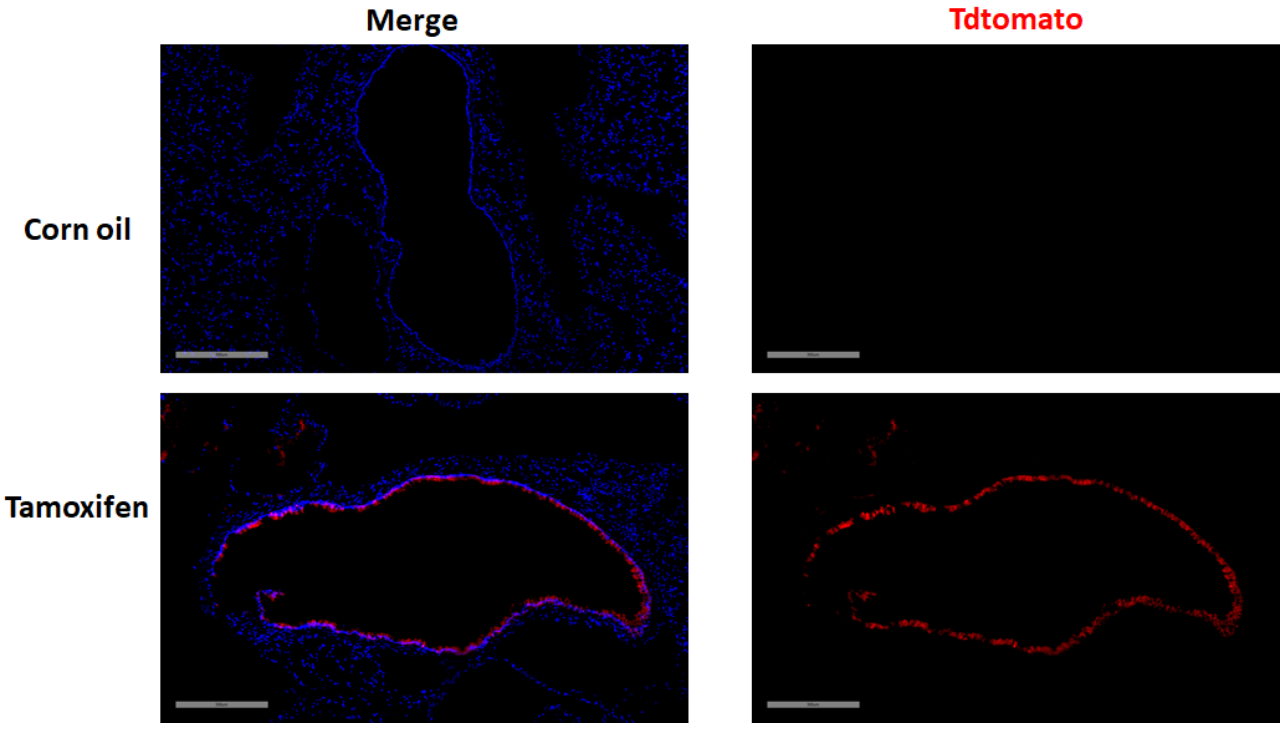

Fig. 2 CreERT2-mediated recombination in the bronchial epithelium of Prom1-CreERT2; Rosa26-tdTomato mice after tamoxifen treatment.

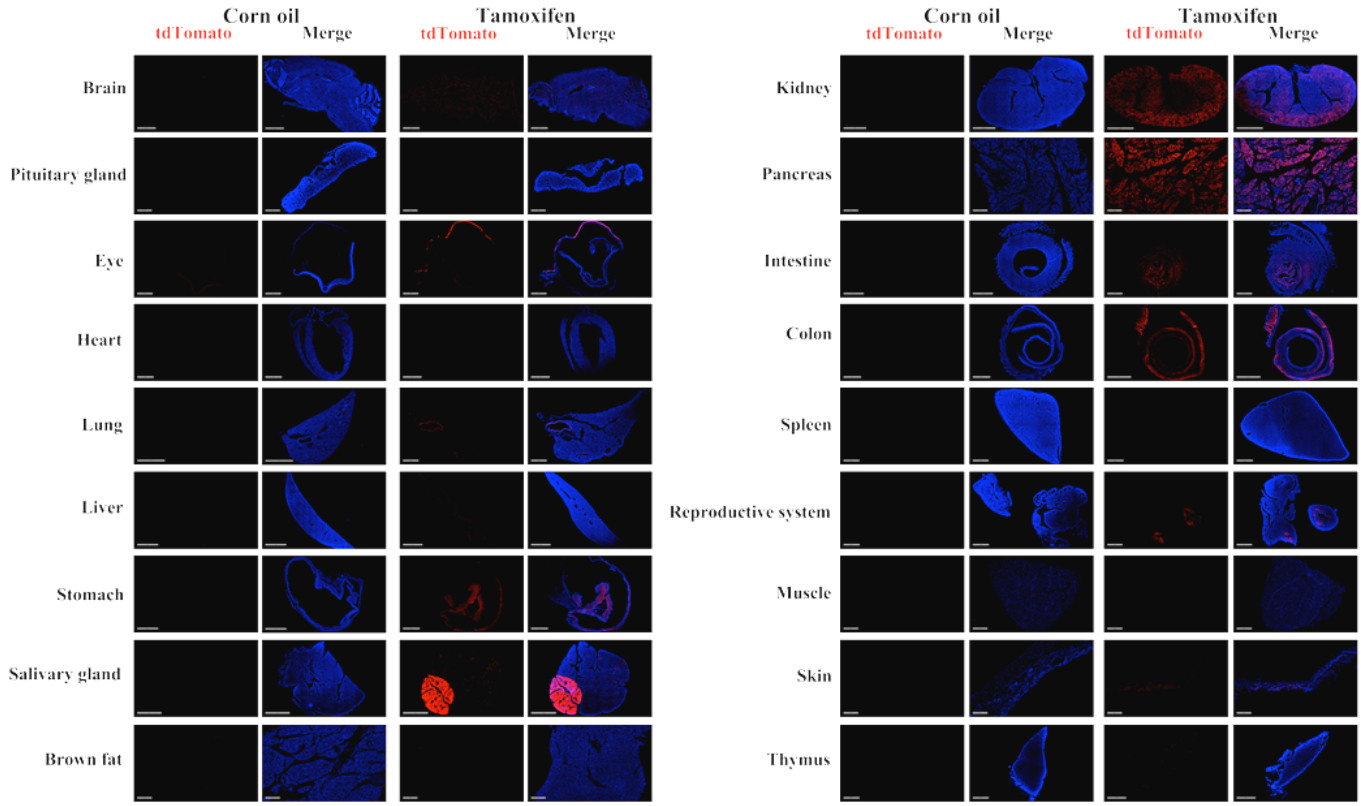

Fig. 3 Tdtomato was also abundantly expressed in brain, pancreas, kidney, lung bronchus, large intestine, small intestine, salivary gland, stomach, and thymus (leaky expression); expressed in individual cells of retina, ovary, and uterus. There was a small amount of expression in liver and leaky expression in retina, ovary, and liver of control group. (For more information please contact: 400-728-0660.)