

Slc6a11-CreERT2

Nomenclature	C57BL/6Smoc- <i>Slc6a11</i> ^{em1(CreERT2-polyA(SV40)Smoc}
Cat. NO.	NM-KI-200130
Strain State	Repository Live

Gene Summary

Gene Symbol Slc6a11	Synonyms	GAT4; Gat3; Gabt4; D930045G19Rik; E130202I16Rik
	NCBI ID	243616
	MGI ID	95630
	Ensembl ID	ENSMUSG00000030307
	Human Ortholog	SLC6A11

Model Description

A CreERT2-polyA expression cassette was knocked into the Slc6a11 gene start codon site. Slc6a11 encodes GAT3 (Gabt4), a sodium-dependent transporter that uptakes the inhibitory neurotransmitter gamma-aminobutyric acid (GABA), which ends the GABA neurotransmission. When Slc6a11-CreERT2 mice are bred with mice containing loxP-flanked sequence, tamoxifen-inducible, Cre-mediated recombination will result in deletion of the floxed sequences in SLC6A11positive cells. Defects in Slc6a11 may result in epilepsy or behavioral and intellectual defects.

Research Application: Cre recombinase tool; Neuroscience

*Literature published using this strain should indicate: Slc6a11-CreERT2 mice (Cat. NO. NM-KI-200130) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

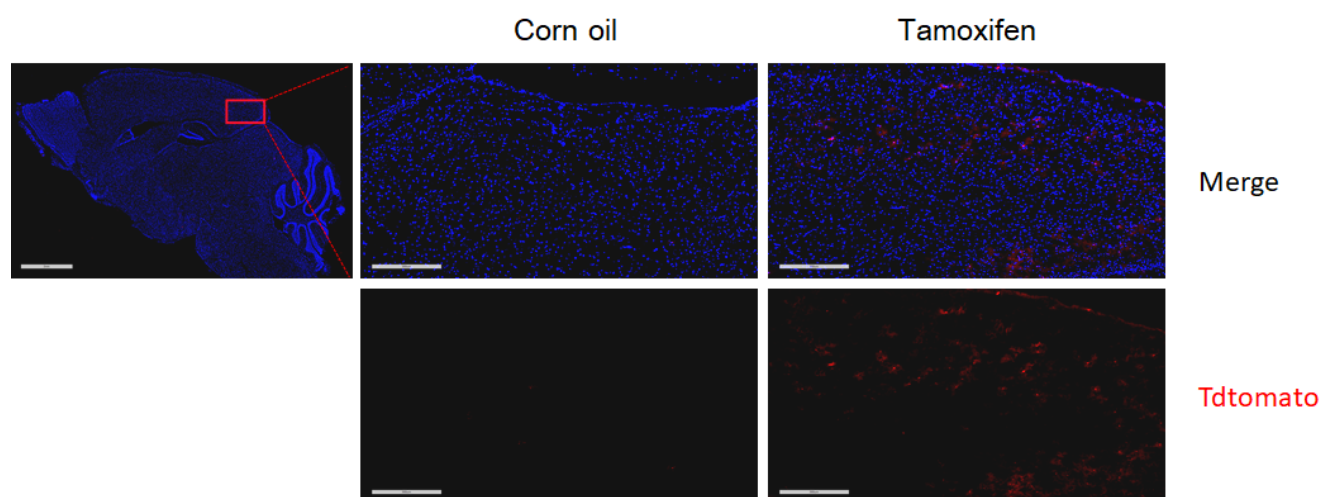


Fig.1 CreERT2-mediated recombination in the cerebral cortex of Slc6a11-CreERT2; Rosa26-tdTomato mice after tamoxifen treatment.

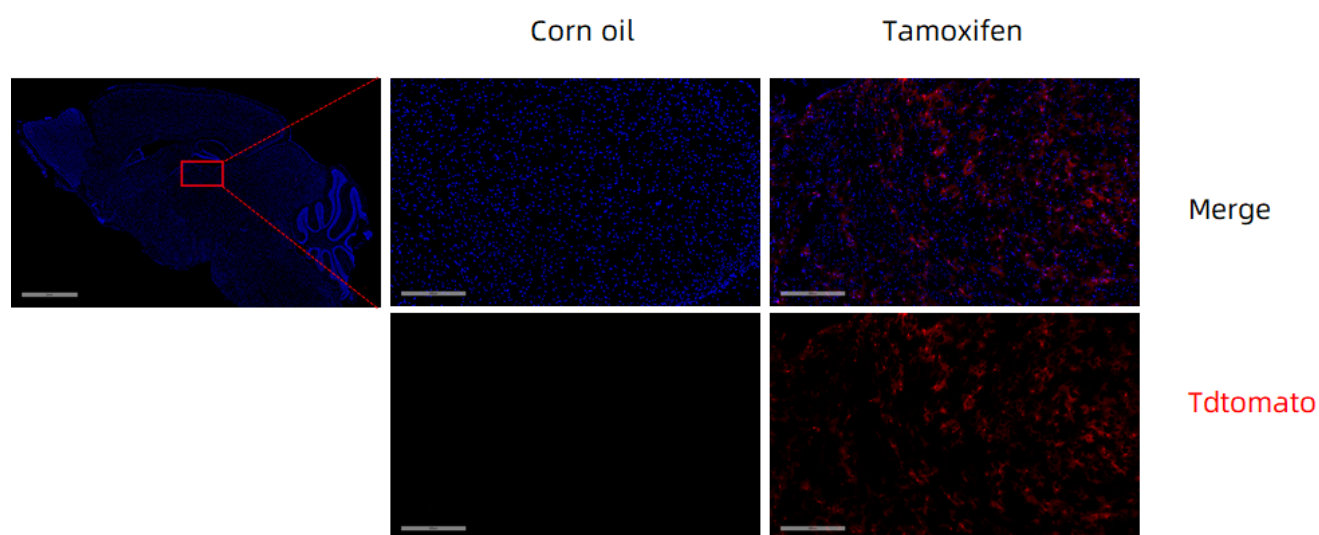


Fig. 2 CreERT2-mediated recombination in the cerebral ganglion of Slc6a11-CreER; Rosa26-tdTomato mice after tamoxifen treatment.

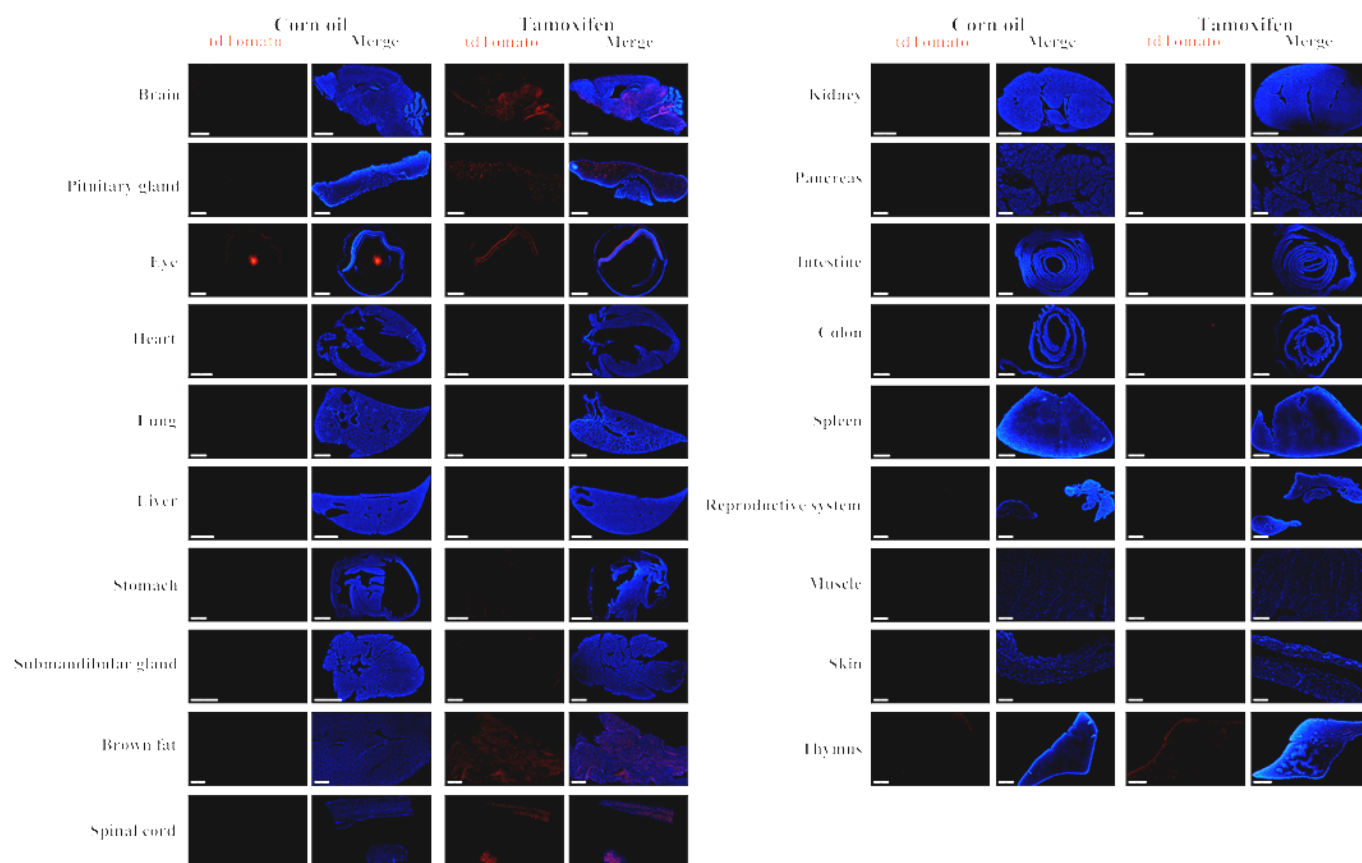


Fig3 Labeling was also observed in pituitary, retina, individual cells of submaxillary gland, large intestine and brown fat, but not in lung, liver, stomach, kidney, pancreas, small intestine, epidermis, cardiac muscle, testis, skeletal muscle, and heart valves (For more information please contact: 400-728-0660.)