

Oxt-IRES-Cre

Nomenclature	C57BL/6Smoc- <i>Oxt</i> ^{em1(IRES-iCre)Smoc}
Cat. NO.	NM-KI-200090
Strain State	Repository Live

Gene Summary

Gene Symbol Oxt	Synonyms	OT; Oxy
	NCBI ID	18429
	MGI ID	97453
	Ensembl ID	ENSMUSG00000027301
	Human Ortholog	OXT

Model Description

A IRES-iCre expression cassette was knocked into the Oxt gene stop codon site.

Research Application: Cre recombinase tool; Oxt-IRES-Cre mice express Cre recombinase under the control of the endogenous oxytocin (Oxt) promoter. Cre recombinase is expressed in the brain. When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in neurons expressing oxytocin.

*Literature published using this strain should indicate: Oxt-IRES-Cre mice (Cat. NO. NM-KI-200090) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

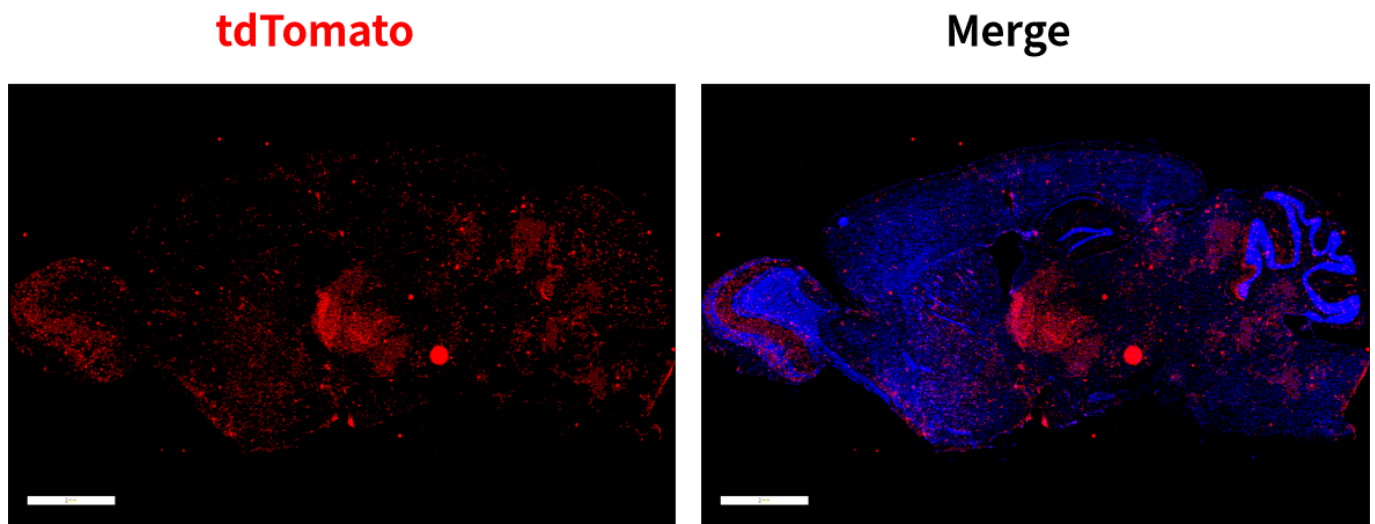


Fig. 1 Cre-mediated recombination in the brain of $Oxt^{Cre/+}; Rosa26^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the olfactory bulb, cortex, thalamus and cerebellum derived from $Oxt^{Cre/+}; Rosa26^{tdTomato/+}$ mouse.

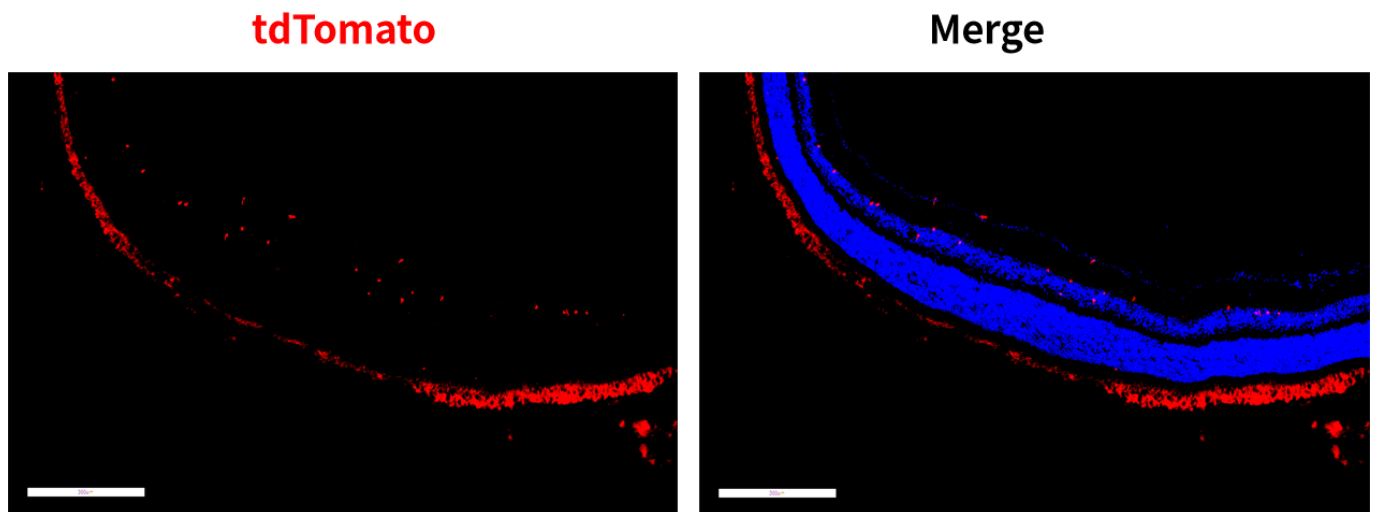


Fig. 2 Cre-mediated recombination in the eyes of $Oxt^{Cre/+}; Rosa26^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the retinal inner nuclear layer and ganglion cell layer derived from $Oxt^{Cre/+}; Rosa26^{tdTomato/+}$ mouse.

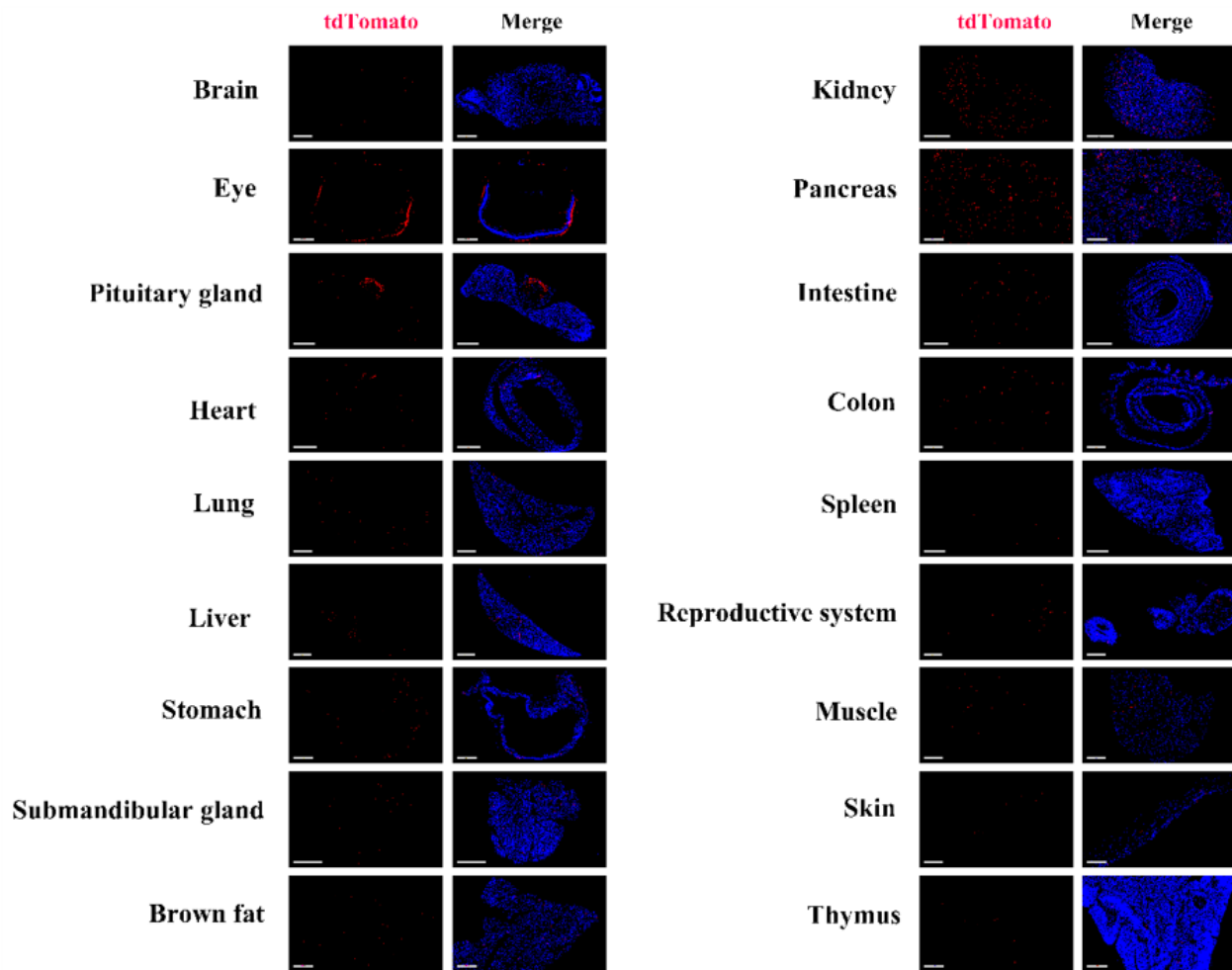


Fig. 3 Detection of tdTomato(red) in various tissues of $Oxt^{Cre/+}; Rosa26^{tdTomato/+}$ mice. Cre mediated recombination can be detected in some cells of the brain, retina, pituitary gland, heart, lung, liver, salivary gland, brown fat, kidney, pancreas, intestine, colon, spleen, ovary, skeletal muscle, skin and thymus. (For more detailed information please contact our technical advisor.)