

Slc17a6-IRES-Cre

Nomenclature	C57BL/6Smoc- <i>Slc17a6</i> ^{em1(IRES-iCre)Smoc}
Cat. NO.	NM-KI-200087
Strain State	Repository Live

Gene Summary

Gene Symbol Slc17a6	Synonyms	DNPI; VGLUT2; 2900073D12Rik
	NCBI ID	140919
	MGI ID	2156052
	Ensembl ID	ENSMUSG00000030500
	Human Ortholog	SLC17A6

Model Description

A IRES-iCre expression cassette was knocked into the *Slc17a6* gene stop codon site.

Research Application: Cre recombinase tool; The glutamate transporter 2 gene (*Vglut2/Slc17a6*) is expressed in multiple brain regions. When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in cells expressing cre.

*Literature published using this strain should indicate: *Slc17a6*-IRES-Cre mice (Cat. NO. NM-KI-200087) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

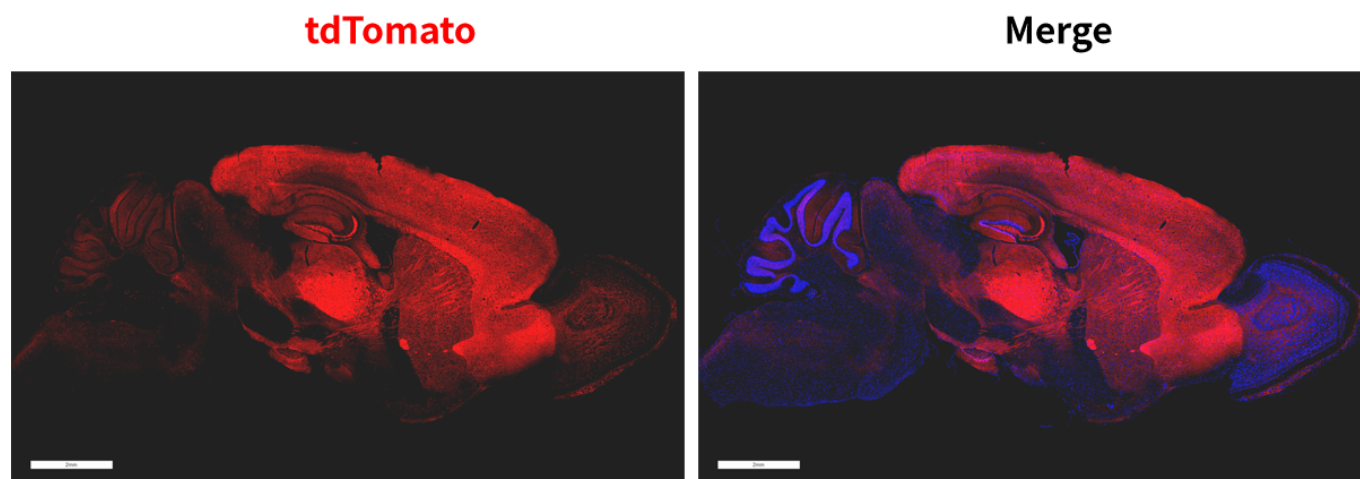


Fig. 1 Cre-mediated recombination in the brain of $Slc17a6^{Cre/+}; Rosa26^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the cortex, hippocampus and thalamus derived from $Slc17a6^{Cre/+}; Rosa26^{tdTomato/+}$ mouse.

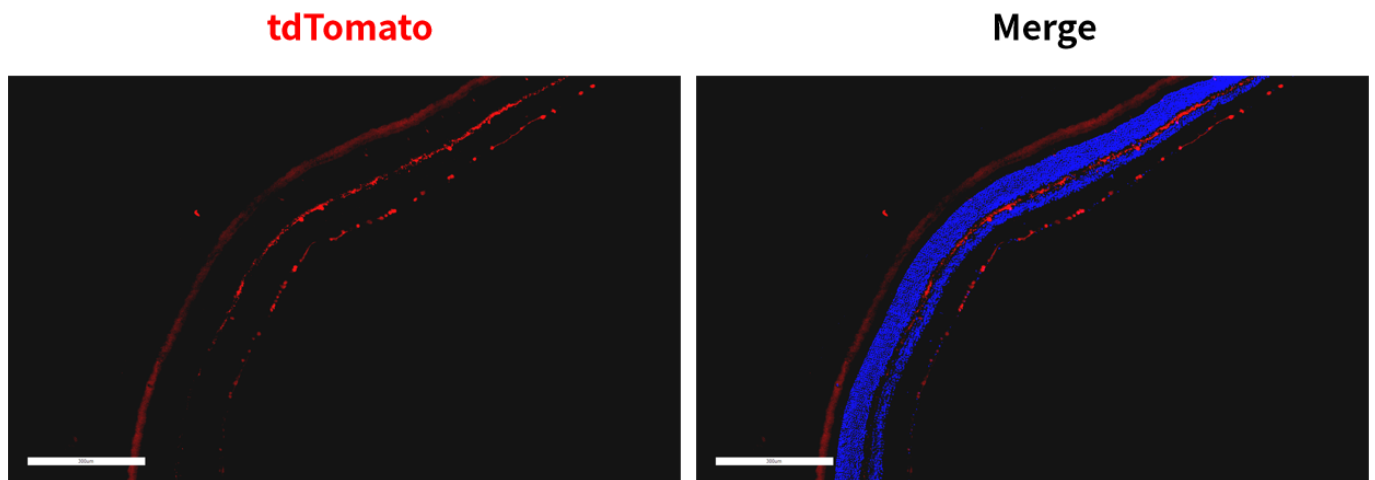


Fig. 2 Cre-mediated recombination in the retina of $Slc17a6^{Cre/+}; Rosa26^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the retinal ganglion cell layer derived from $Slc17a6^{Cre/+}; Rosa26^{tdTomato/+}$ mouse.

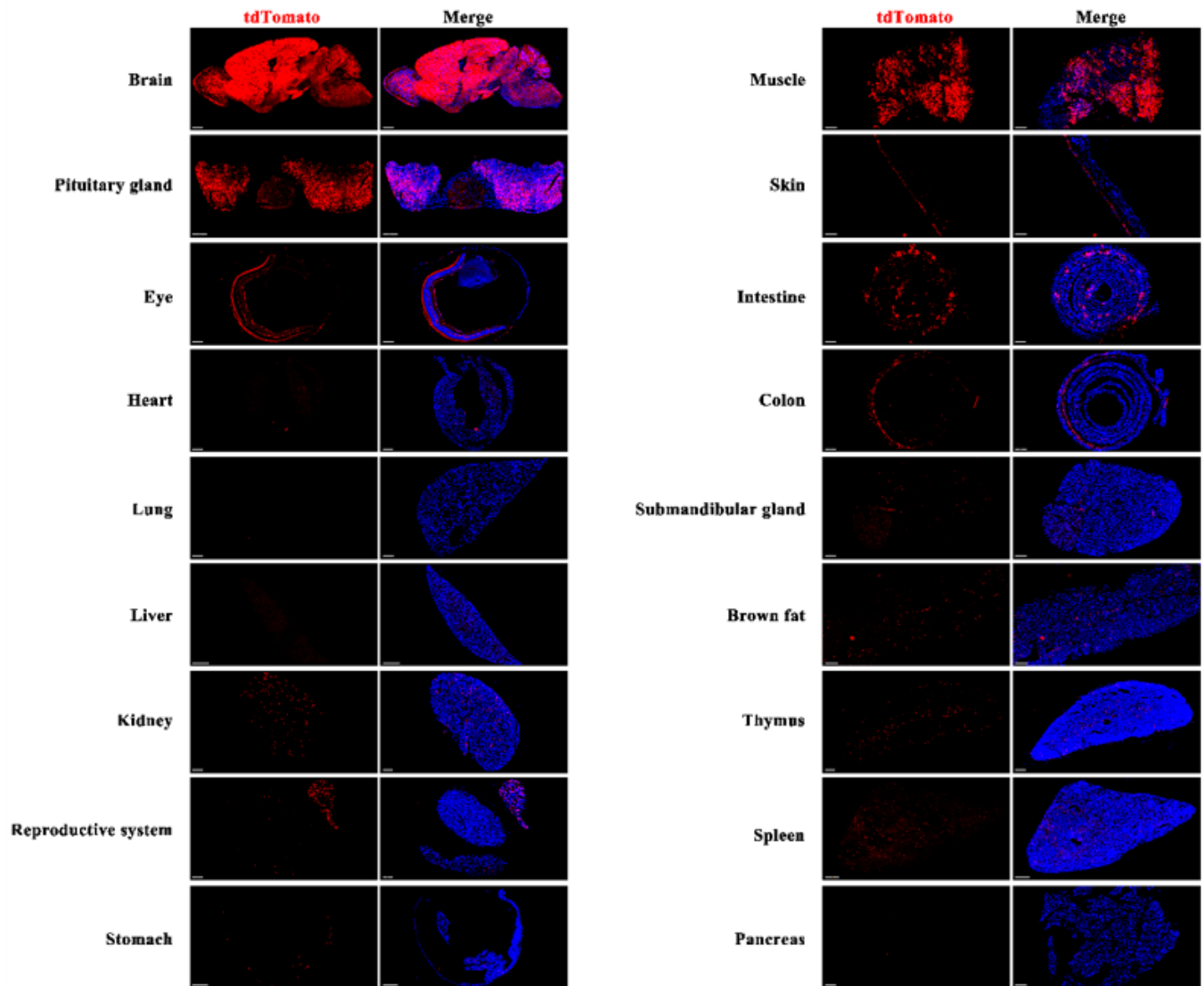


Fig. 3 Detection of tdTomato(red) in various tissues of $Slc17a6^{Cre/+}; Rosa26^{tdTomato/+}$ mice. Cre mediated recombination can be detected in the cortex, hippocampus, striatum and thalamus. TdTomato can also be detected in individual cells of the retinal ganglion cell layer and extranet layer, pituitary gland, heart, kidney, testis, epididymis, brown fat, thymus, spleen, stomach, skeletal muscle, intestine, colon, salivary gland and pancreas islet. Tdtomato expression can not be observed in the lung, liver or skin. (For more detailed information please contact our technical advisor.)

Publications

[Ameliorating parkinsonian motor dysfunction by targeting histamine receptors in entopeduncular nucleus-thalamus circuitry](#)

References: PNAS