

Slc17a7-IRES-Cre

Nomenclature	C57BL/6Smoc- <i>Slc17a7</i> ^{em1(IRES2-iCre)Smoc}
Cat. NO.	NM-KI-200086
Strain State	Repository Live

Gene Summary

Gene Symbol Slc17a7	Synonyms	Vglut1; AI851913; 2900052E22Rik
	NCBI ID	72961
	MGI ID	1920211
	Ensembl ID	ENSMUSG00000070570
	Human Ortholog	SLC17A7

Model Description

A IRES2-iCre expression cassette was knocked into the Slc17a7 gene stop codon site.

Research Application: Cre recombinase tool; Slc17a7(Sodium dependent Inorganic Phosphate cotransporter) is also known as Vglut1(Glutamate transporter). When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in cells expressing Slc17a7. This strain may be useful for studying glutamatergic synaptic vesicle trafficking and vesicle-bound, sodium-dependent phosphate transportation.

*Literature published using this strain should indicate: Slc17a7-IRES-Cre mice (Cat. NO. NM-KI-200086) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

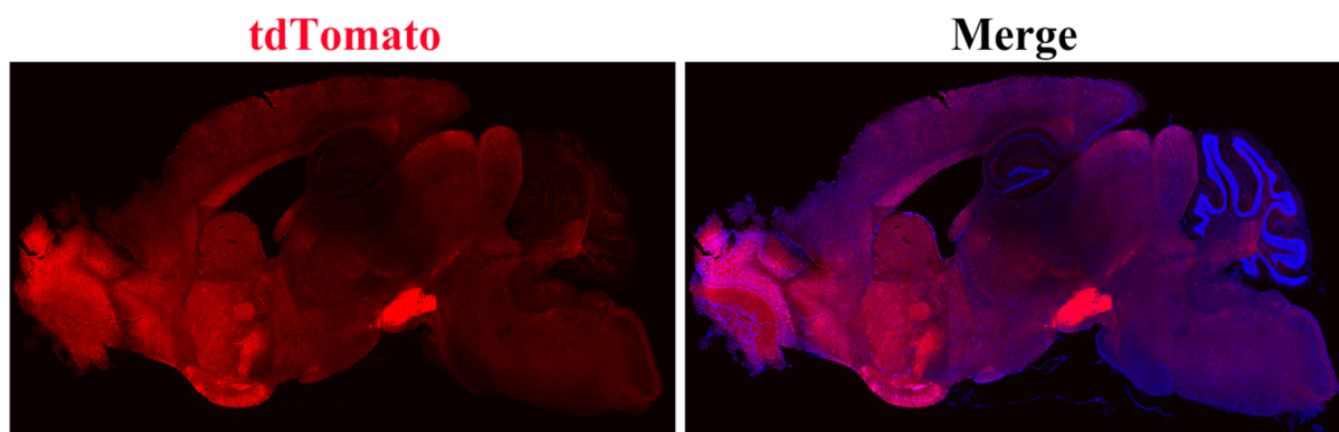


Fig. 1 Cre-mediated recombination in the brain of *Slc17a7^{Cre/+}; Rosa26^{tdTomato/+}* mouse. TdTomato(red) is widely expressed in the brain of *Slc17a7^{Cre/+}; Rosa26^{tdTomato/+}* mouse.

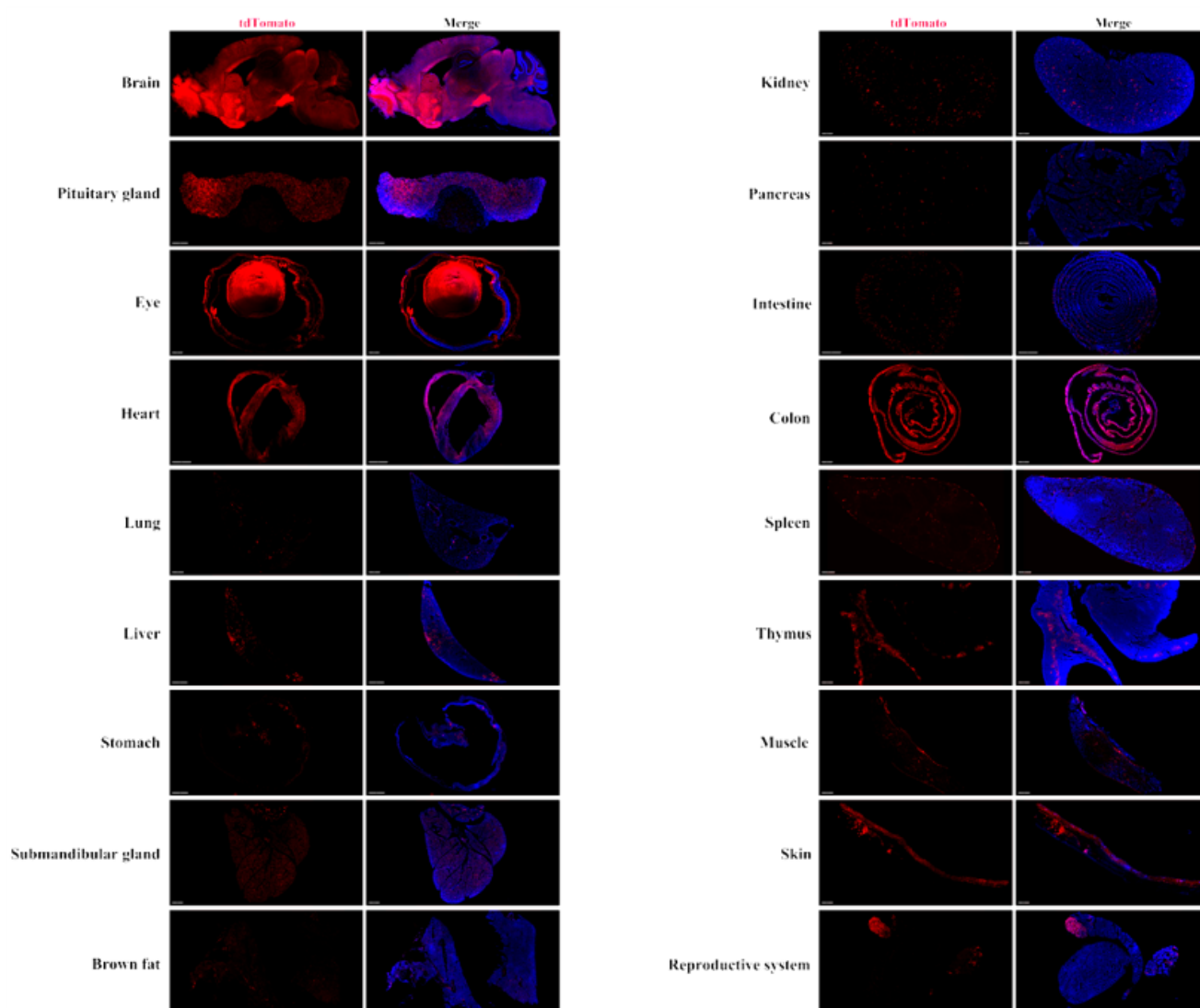


Fig. 2 Detection of tdTomato(red) in various tissues of *Slc17a7^{Cre/+}; Rosa26^{tdTomato/+}* mice. Cre mediated recombination can be detected in the brain, pituitary gland, eyes, heart, skin and colon. TdTomato can also be detected in individual cells of the lung, liver, stomach, submandibular gland, brown fat, muscle, spleen, thymus, small intestine, pancreas, kidney and epididymis. (For more detailed information please contact our technical advisor.)

