

# Slc17a7-IRES-Cre

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

## Gene Summary

<b>Gene Symbol</b> <b>Slc17a7</b>	<b>Synonyms</b>	Vglut1; AI851913; 2900052E22Rik
	<b>NCBI ID</b>	<a href="#">72961</a>
	<b>MGI ID</b>	<a href="#">1920211</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000070570</a>
	<b>Human Ortholog</b>	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

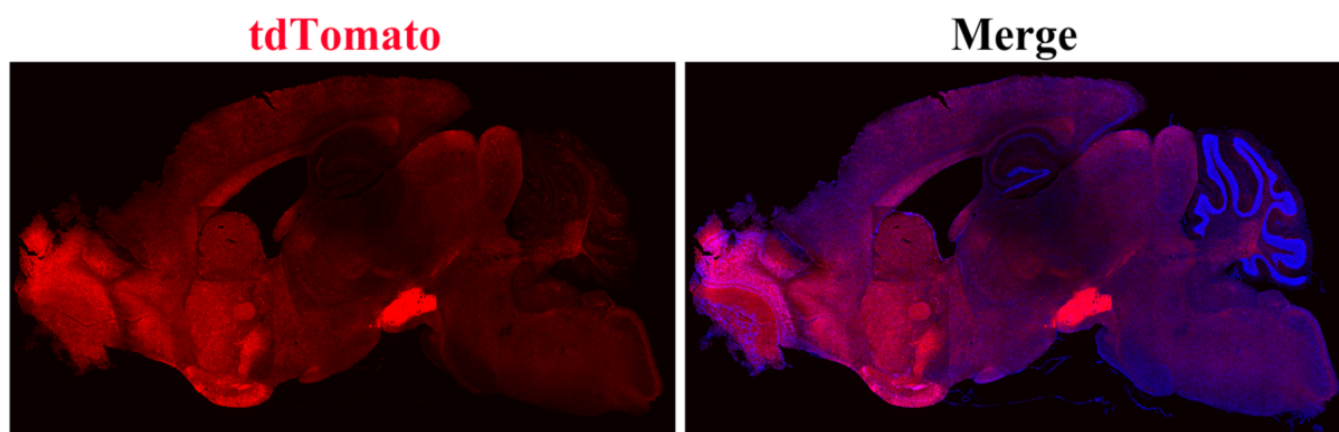


Fig. 1 Cre-mediated recombination in the brain of *Slc17a7<sup>Cre/+</sup>; Rosa26<sup>tdTomato/+</sup>* mouse. TdTomato(red) is widely expressed in the brain of *Slc17a7<sup>Cre/+</sup>; Rosa26<sup>tdTomato/+</sup>* mouse.

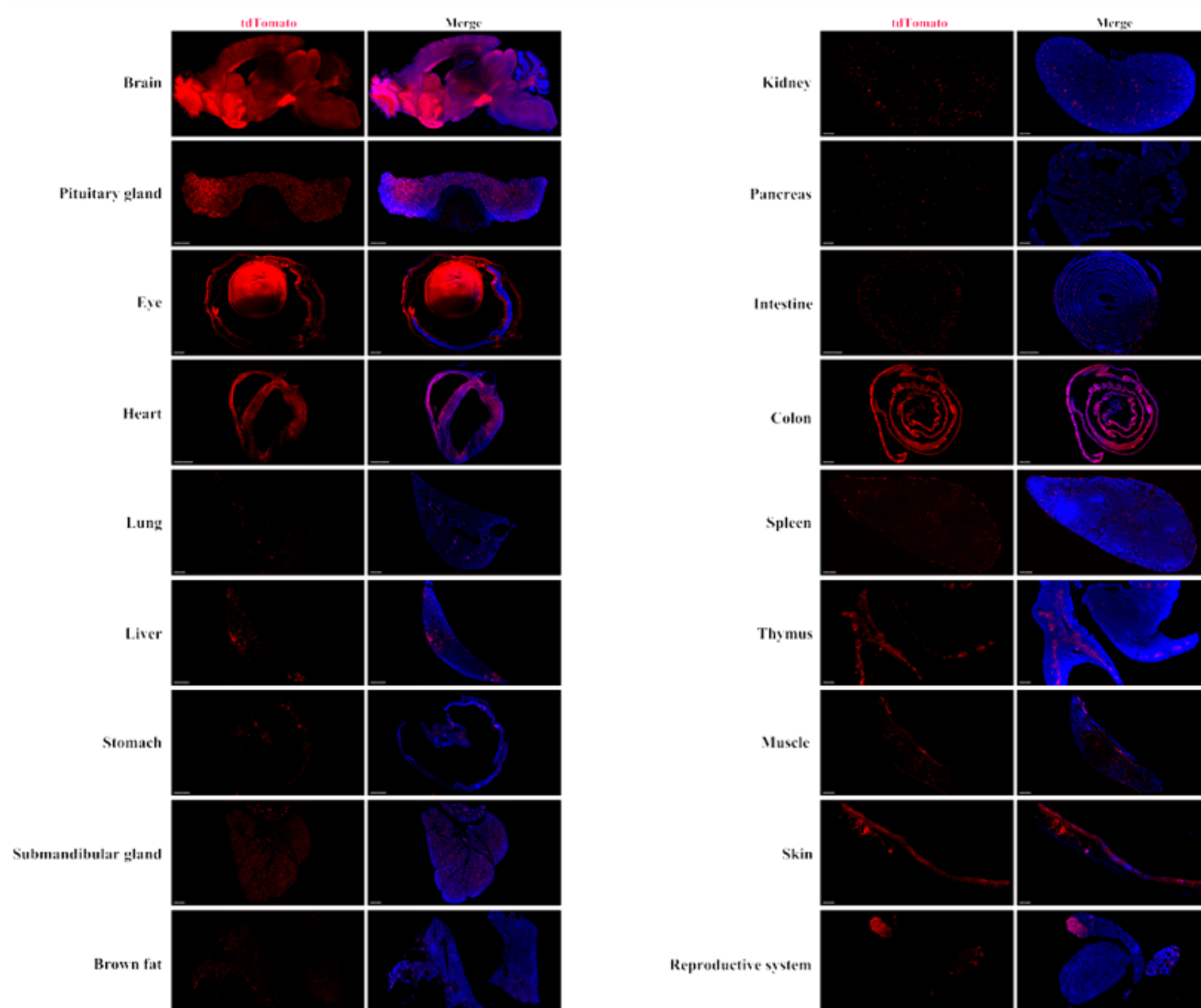


Fig. 2 Detection of tdTomato(red) in various tissues of *Slc17a7<sup>Cre/+</sup>; Rosa26<sup>tdTomato/+</sup>* mice. Cre mediated recombination can be detected in the brain, pituitary gland, eyes, heart, skin and colon. TdTomato can also be detected in individual cells of the lung, liver, stomach, submandibular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

