

Slc32a1-IRES-Cre

Nomenclature	C57BL/6Smoc- <i>Slc32a1</i> ^{em1(IRES-iCre)Smoc}
Cat. NO.	NM-KI-200081
Strain State	Repository Live

Gene Summary

Gene Symbol Slc32a1	Synonyms	VGAT; Viaat; R75019
	NCBI ID	22348
	MGI ID	1194488
	Ensembl ID	ENSMUSG00000037771
	Human Ortholog	SLC32A1

Model Description

A IRES-iCre expression cassette was knocked into the Slc32a1 gene stop codon site.

Research Application: Cre recombinase tool; Slc32a1 is a member of the GABA Vesicular Transporter Family. When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in cells expressing cre. This strain may be useful for studying GABAergic neurons function.

*Literature published using this strain should indicate: Slc32a1-IRES-Cre mice (Cat. NO. NM-KI-200081) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

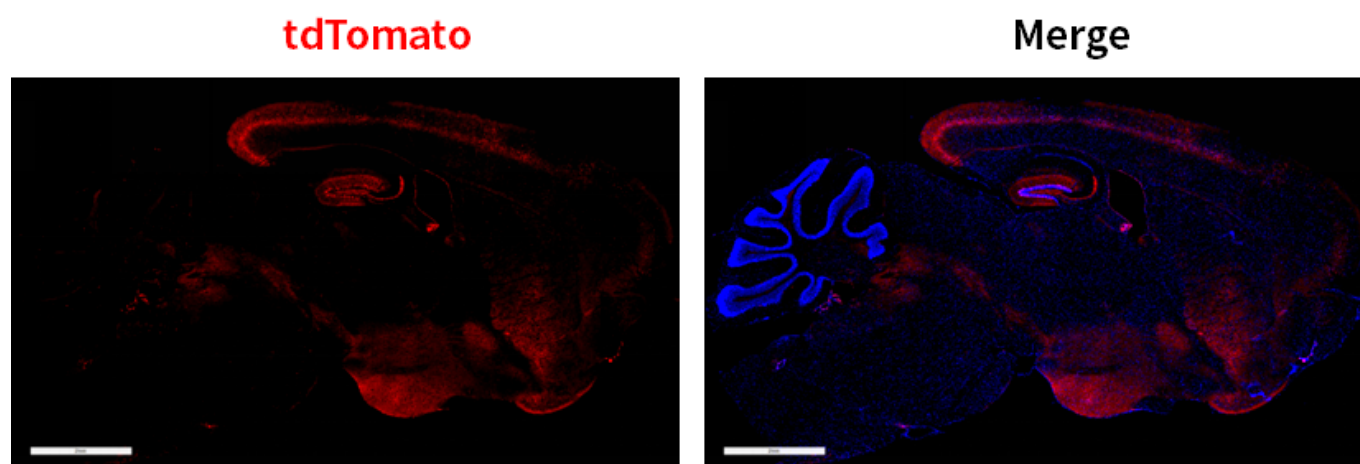


Fig. 1 Cre-mediated recombination in the brain of $Slc32a1^{Cre/+}$; $Rosa26^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the cortex, hippocampus, hypothalamus and cerebellum of $Slc32a1^{Cre/+}$; $Rosa26^{tdTomato/+}$ mouse.

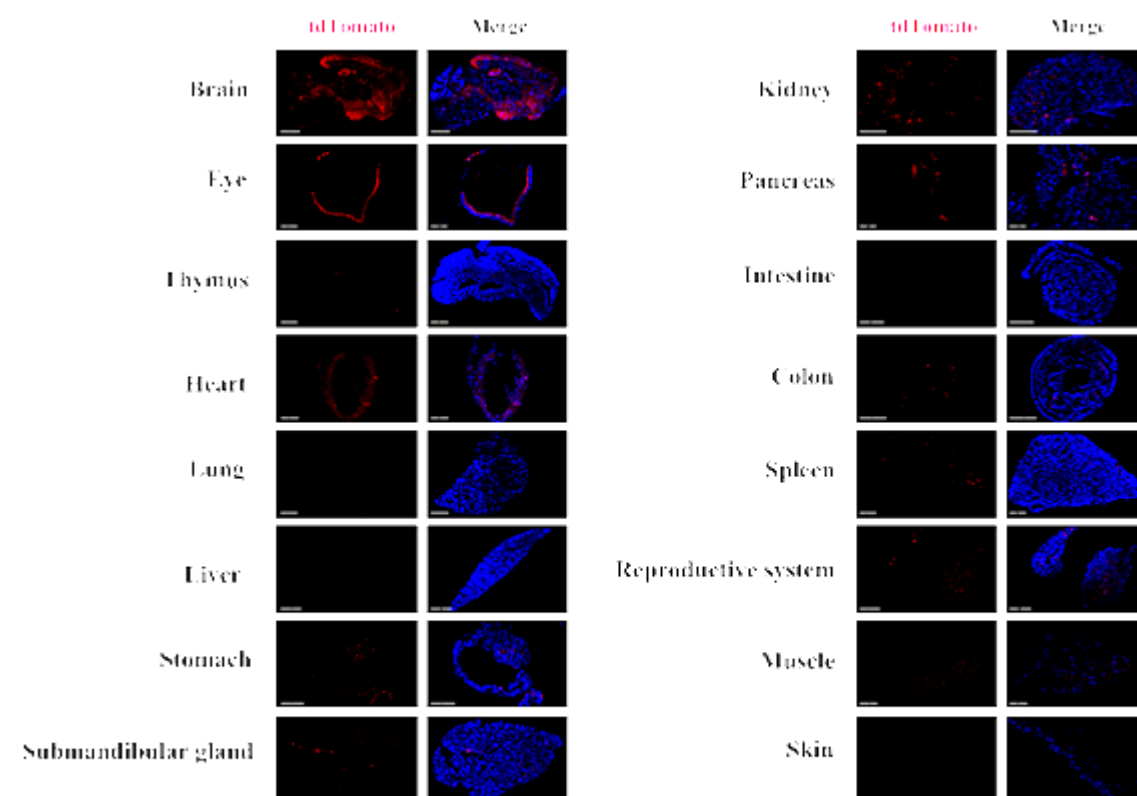


Fig. 2 Detection of tdTomato(red) in various tissues of $Slc32a1^{Cre/+}$; $Rosa26^{tdTomato/+}$ mice. Cre mediated recombination can be detected in the cortex, hippocampus, hypothalamus, cerebellum, retinal ganglion cell layer, retinal outer plexiform layer and inner nuclear layer. TdTomato can also be detected in individual cells of the salivary gland, kidney, pancreas, large intestine, spleen, thymus, testis and epididymis. TdTomato expression can not be observed in the heart, lung, liver, small intestine and skin. (For more detailed information please contact our technical advisor.)