Glp1r-IRES-Cre

Nomenclature	C57BL/6Smoc-*Glp1r*$^{em1(IRES-iCre)Smoc}$
Cat. NO.	NM-KI-200134
Strain State	Sperm cryopreservation

Gene Summary

Gene Symbol Glp1r	**Synonyms**	GLP-1R; GLP1Rc
	NCBI ID	14652
	MGI ID	99571
	Ensembl ID	ENSMUSG00000024027
	Human Ortholog	GLP1R

Model Description

A IRES-iCre expression cassette was knocked into the Glp1r gene stop codon site.
Research Application: Cre recombinase tool; When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in cells expressing cre. GLP1R encodes a receptor present on many cell types including pancreatic β cells, subsets of neurons in the central nervous system, as well as a subset of vagal sensory neurons in the gastrointestinal tract.
*Literature published using this strain should indicate: Glp1r-IRES-Cre mice (Cat. NO. NM-KI-200134) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

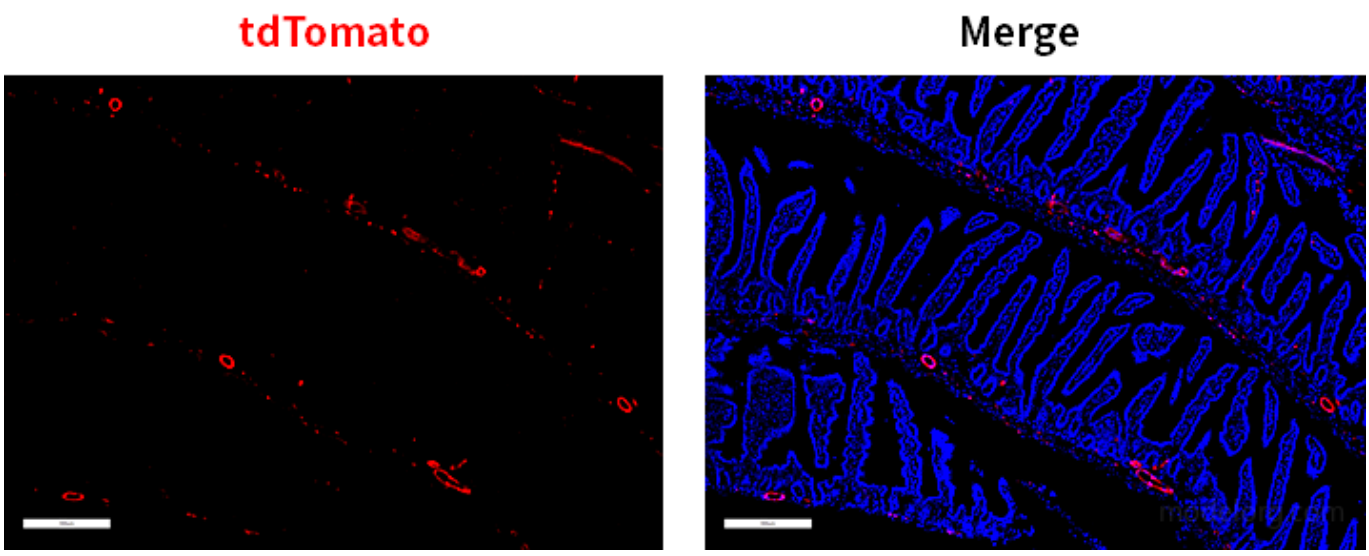

Fig. 1 Cre-mediated recombination in the small intestine of Glp1r$^{Cre/+}$; Rosa26$^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the muscular layer of the wall of the small intestine derived from Glp1r$^{Cre/+}$; Rosa26$^{tdTomato/+}$ mouse.

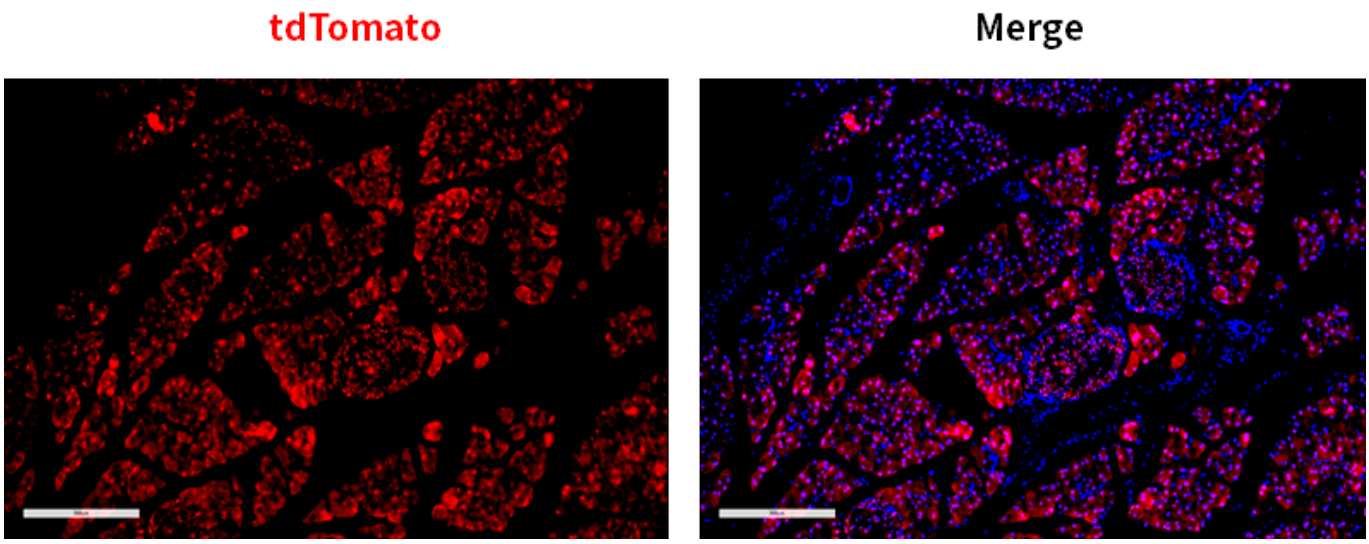

Fig. 2 Cre-mediated recombination in the pancreas of Glp1r$^{Cre/+}$; Rosa26$^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the acinar and islet cells of Glp1r$^{Cre/+}$; Rosa26$^{tdTomato/+}$ mouse.

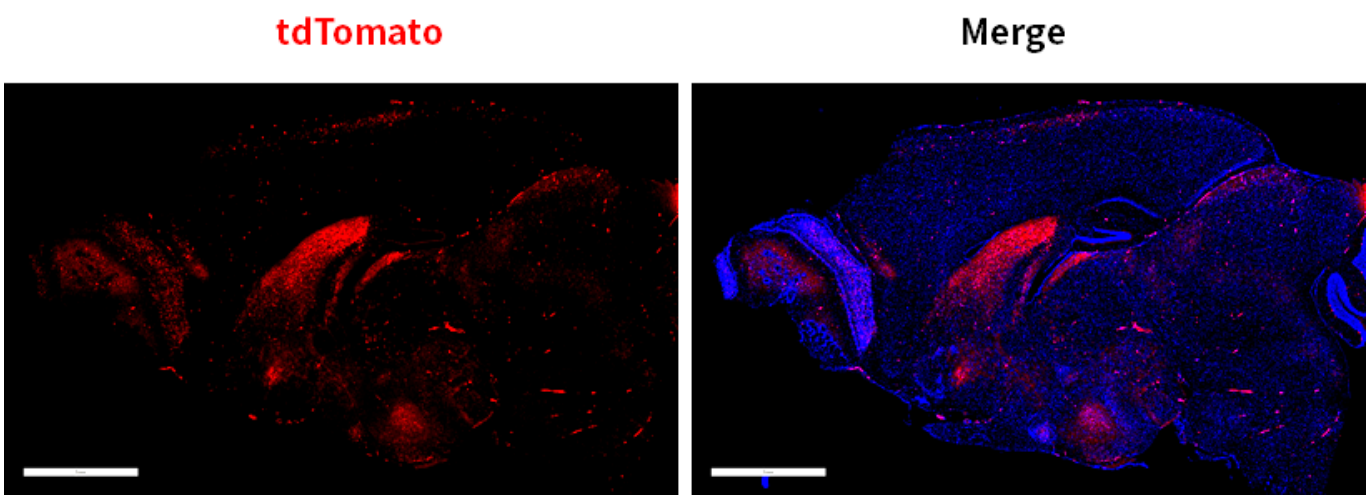

Fig. 3 Cre-mediated recombination in the brain of Glp1r$^{Cre/+}$; Rosa26$^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in individual cells of olfactory bulb, cortex, interbrain, thalamus and hypothalamus derived from Glp1r$^{Cre/+}$; Rosa26$^{tdTomato/+}$ mouse.

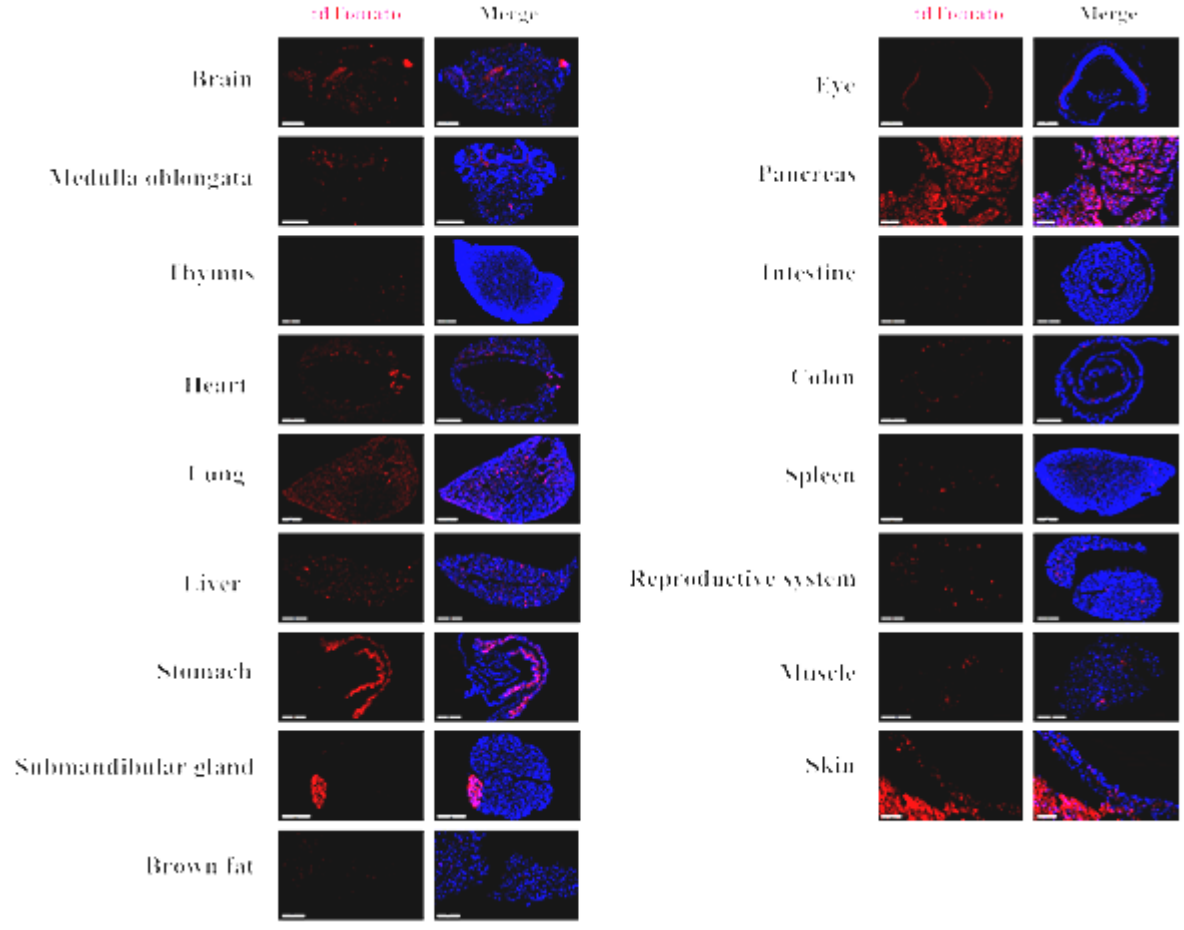

Fig. 4 Detection of tdTomato(red) in various tissues of Glp1r$^{Cre/+}$; Rosa26$^{tdTomato/+}$ mice. Cre mediated recombination can be detected in some cells of pancreas. TdTomato can also be detected in individual cells of the brain, intestine, colon, heart, lung, liver, stomach, submandibular gland, testis, epididymis, skin, skeletal muscle and spleen. Tdtomato expression can not be observed in the brown fat, thymus or retina. (For more detailed information please contact our technical advisor.)