

# Penk-IRES-Cre

<b>Nomenclature</b>	C57BL/6Smoc- <i>Penk</i> <sup>em1(IRES2-iCre)Smoc</sup>
<b>Cat. NO.</b>	NM-KI-200088
<b>Strain State</b>	Repository Live

## Gene Summary

<b>Gene Symbol</b> <b>Penk</b>	<b>Synonyms</b>	ENK; PPA; Penk1; AI326464
	<b>NCBI ID</b>	<a href="#">18619</a>
	<b>MGI ID</b>	<a href="#">104629</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000045573</a>
	<b>Human Ortholog</b>	PENK

## Model Description

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

**Research Application:** Penk gene encodes prodynorphin. When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in cells expressing cre. The gene product is involved in regulating synaptic plasticity, a crucial neurochemical mechanism underlying learning and memory.

\*Literature published using this strain should indicate: Penk-IRES-Cre mice (Cat. NO. NM-KI-200088) were purchased from Shanghai Model Organisms Center, Inc..

## Validation Data

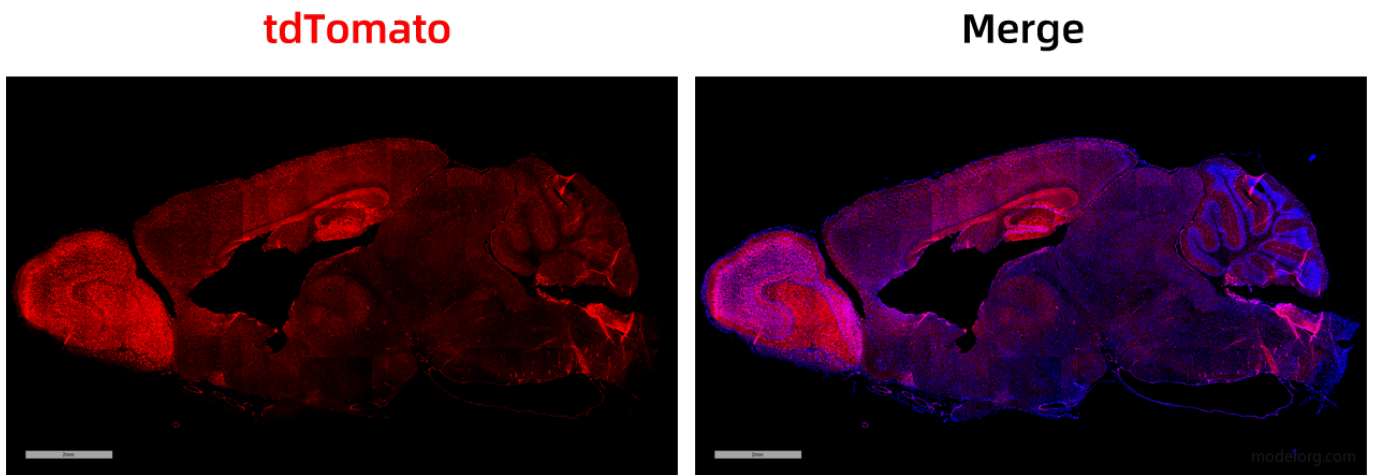


Fig. 1 Cre-mediated recombination in the brain of *PenkCre/+; Rosa26tdTomato/+* mouse. TdTomato(red) expression can be detected in the brain of *PenkCre/+; Rosa26tdTomato/+* mouse.

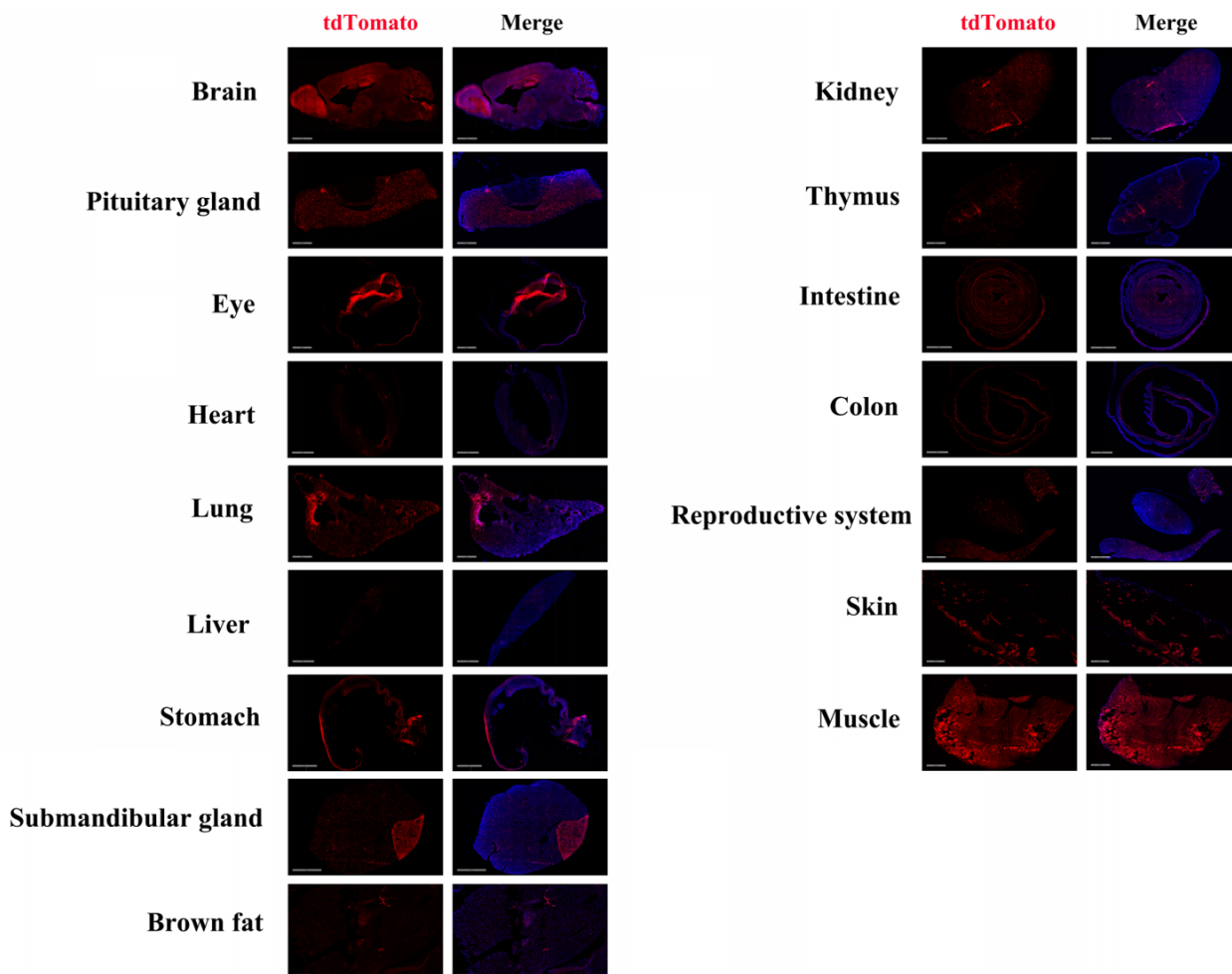


Fig. 2 Detection of tdTomato(red) in various tissues of *PenkCre/+; Rosa26tdTomato/+* mice. Tdtomato is expressed throughout the brain. And cre-mediated recombination can be detected in some cells of the pituitary gland, kidney, intestine, colon, retina, brown fat, testis, epididymis, salivary gland, stomach, thymus, lung, heart, liver and skin. (For more detailed information please contact our technical advisor.)

