

# Pdyn-IRES-Cre

<b>Nomenclature</b>	C57BL/6Smoc- <i>Pdyn</i> <sup>em1(IRES-iCre)Smoc</sup>
<b>Cat. NO.</b>	NM-KI-200089
<b>Strain State</b>	Sperm cryopreservation

## Gene Summary

<b>Gene Symbol</b> Pdyn	<b>Synonyms</b>	Dyn
	<b>NCBI ID</b>	<a href="#">18610</a>
	<b>MGI ID</b>	<a href="#">97535</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000027400</a>
	<b>Human Ortholog</b>	PDYN

## Model Description

A IRES-iCre expression cassette was knocked into the Pdyn gene stop codon site. Pdyn encodes prodynorphin. 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 depression, stress, anxiety, pain response, circadian rhythm and appetite control.

**Research Application:** Cre recombinase tool; Neuroscience

\*Literature published using this strain should indicate: Pdyn-IRES-Cre mice (Cat. NO. NM-KI-200089) were purchased from Shanghai Model Organisms Center, Inc..

## Validation Data

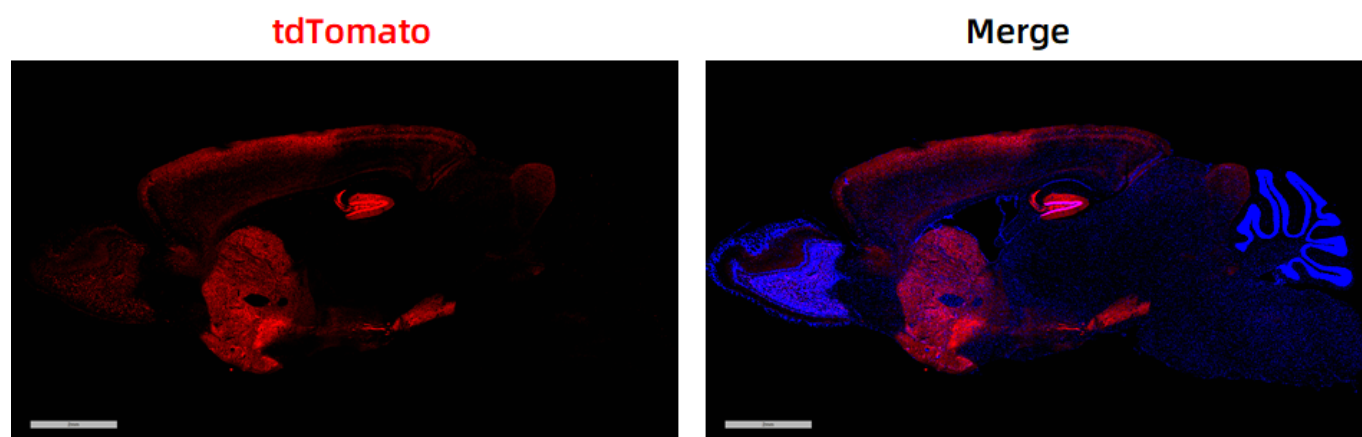


Fig. 1 Cre-mediated recombination in the brain of  $Pdyn^{Cre/+}; Rosa26^{tdTomato/+}$  mouse. TdTomato(red) expression can be detected in the cortex, hippocampus and striatum of  $Pdyn^{Cre/+}; Rosa26^{tdTomato/+}$  mouse.

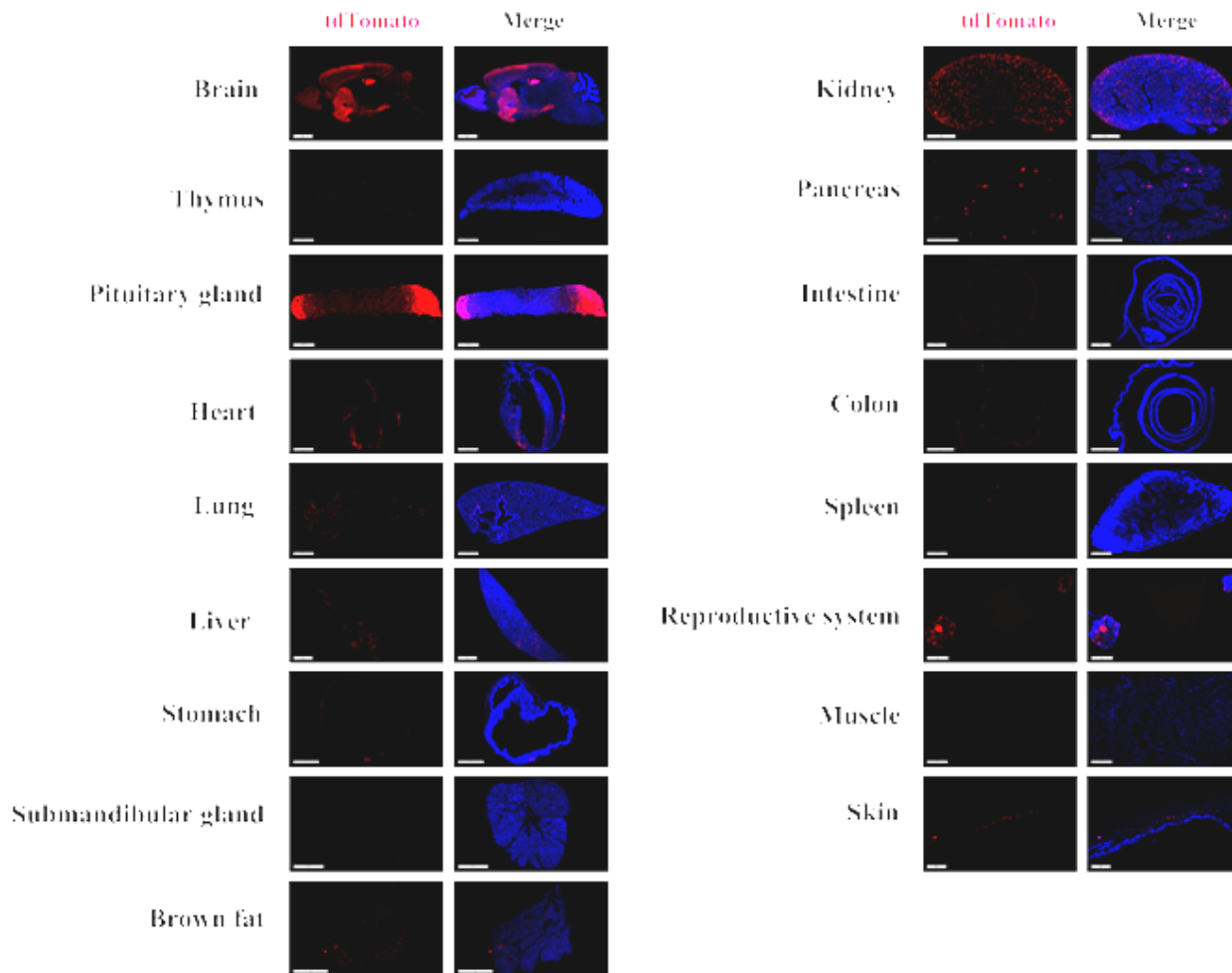


Fig. 2 Detection of tdTomato(red) in various tissues of  $Pdyn^{Cre/+}; Rosa26^{tdTomato/+}$  mice. Cre mediated recombination can be detected in some cells of the brain, kidney, pancreas islet, heart, liver, lung, stomach, brown fat, intestine, colon, ovary, thymus and spleen. Tdtomato expression can not be observed in the salivary gland, skin or muscle. (For more detailed information please contact our technical advisor.)