

Pdyn-IRES-Cre

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

Gene Summary

Gene Symbol Pdyn	Synonyms	Dyn
	NCBI ID	18610
	MGI ID	97535
	Ensembl ID	ENSMUSG00000027400
	Human Ortholog	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

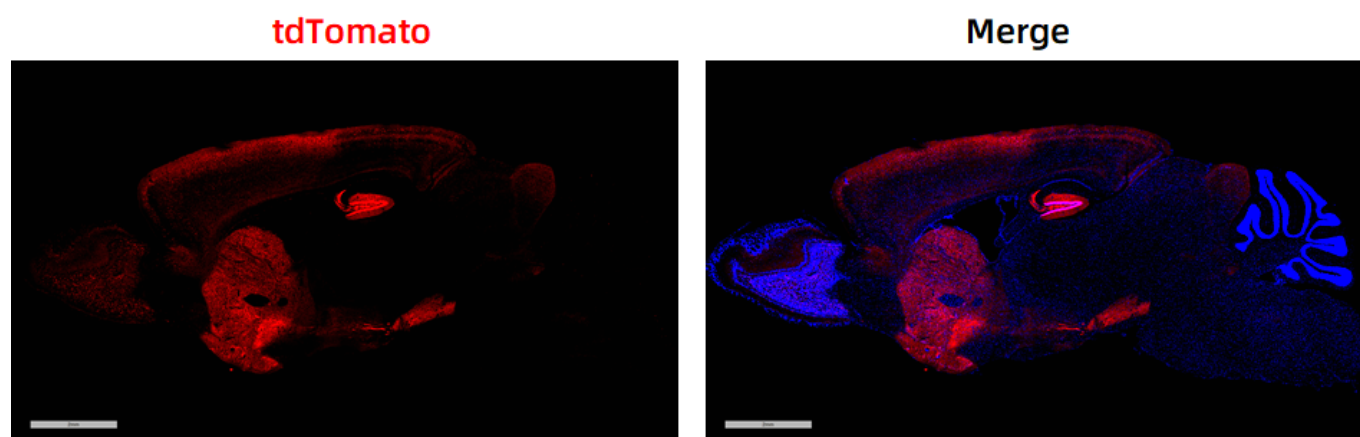


Fig. 1 Cre-mediated recombination in the brain of $Pdyn^{Cre/+}; Rosa26^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the cortex, hippocampus and striatum of $Pdyn^{Cre/+}; Rosa26^{tdTomato/+}$ mouse.

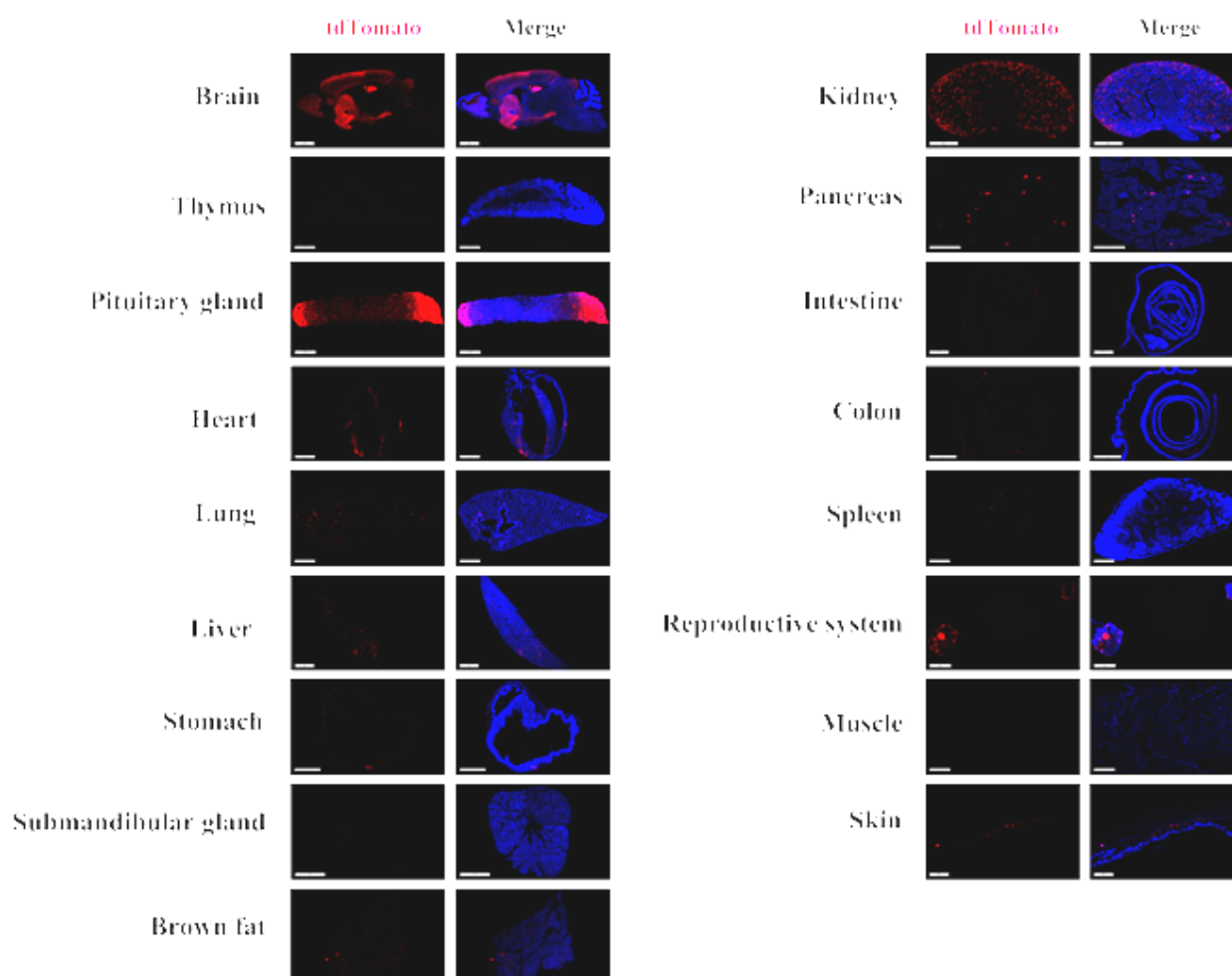


Fig. 2 Detection of tdTomato(red) in various tissues of $Pdyn^{Cre/+}; Rosa26^{tdTomato/+}$ mice. Cre mediated recombination can be detected in some cells of the brain, kidney, pancreas islet, heart, liver, lung, stomach, brown fat, intestine, colon, ovary, thymus and spleen. Tdtomato expression can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