

# Oprk1-2A-Cre

<b>Nomenclature</b>	C57BL/6Smoc- <i>Oprk1</i> <sup>em1(2A-Cre)Smoc</sup>
<b>Cat. NO.</b>	NM-KI-200299
<b>Strain State</b>	Sperm cryopreservation

## Gene Summary

<b>Gene Symbol</b> Oprk1	<b>Synonyms</b>	KOR; R21; KOR-1; MSL-1; Oprk2; K-OR-1
	<b>NCBI ID</b>	<a href="#">18387</a>
	<b>MGI ID</b>	<a href="#">97439</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000025905</a>
	<b>Human Ortholog</b>	OPRK1

## Model Description

2A-Cre expression cassette was knocked into the Oprk1 gene stop codon site. Oprk1 (opioid receptor, kappa 1) encodes opioid receptor which was expressed in multiple brain regions. When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in cells expressing cre. This opioid receptor plays a role in the perception of pain and mediating the hypolocomotor, analgesic and aversive actions of synthetic opioids.

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

\*Literature published using this strain should indicate: Oprk1-2A-Cre mice (Cat. NO. NM-KI-200299) were purchased from Shanghai Model Organisms Center, Inc..

## Validation Data

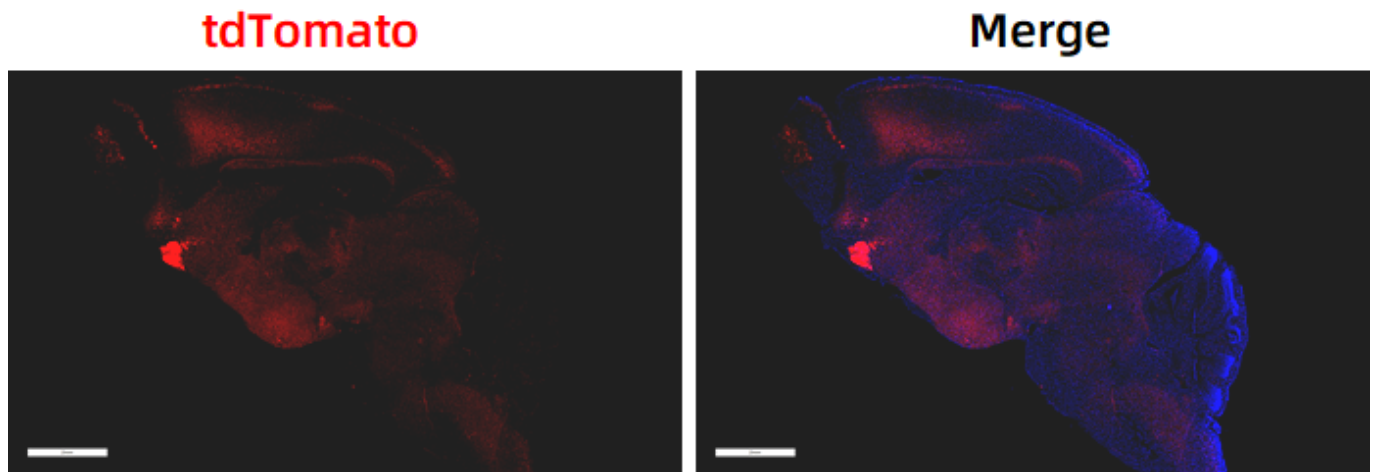


Fig. 1 Cre-mediated recombination in the brain of  $Oprk1^{Cre/+}; Rosa26^{tdTomato/+}$  mouse. TdTomato(red) expression can be detected in the brain of  $Oprk1^{Cre/+}; Rosa26^{tdTomato/+}$  mouse.

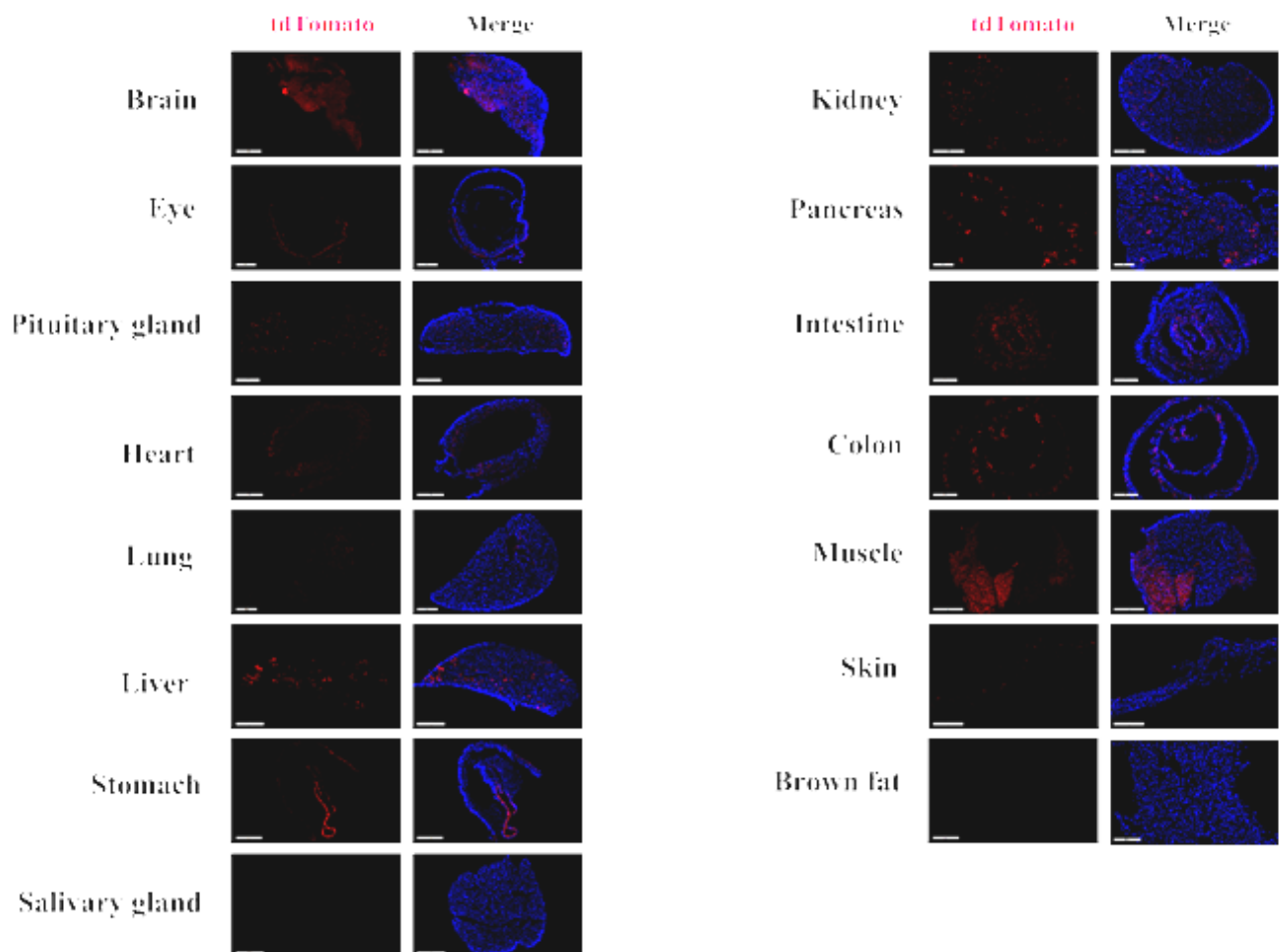


Fig. 2 Detection of tdTomato(red) in various tissues of  $Oprk1^{Cre/+}; Rosa26^{tdTomato/+}$  mice. Tdtomato was also expressed in some cells of the liver, stomach, intestine, colon, muscle, eyes, heart, spleen and lung. Tdtomato expression can not be observed in the salivary gland, brown fat and skin.(For more detailed information please contact our technical advisor.)

