

Wnt1-Dre

Nomenclature	C57BL/6Smoc- <i>Wnt1</i> ^{em1(Dre-Wpre-polyA)Smoc}
Cat. NO.	NM-KI-200176
Strain State	Sperm cryopreservation

Gene Summary

Gene Symbol Wnt1	Synonyms	sw; Int-1; Wnt-1; swaying
	NCBI ID	22408
	MGI ID	98953
	Ensembl ID	ENSMUSG00000022997
	Human Ortholog	WNT1

Model Description

A Dre-Wpre-polyA expression cassette was knocked into the Wnt1 gene start codon site. Wnt1 gene is involved in stem cell poliferation in multiple systems, including the hematopoietic system and the embryonic nervous system. This strain may be useful for studying central nervous system development. When crossed with a strain carrying a gene flanked by rox sites, the flanked gene will be removed in cells expressing dre.

Research Application: Dre recombinase tool; Neurosciences

*Literature published using this strain should indicate: Wnt1-Dre mice (Cat. NO. NM-KI-200176) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

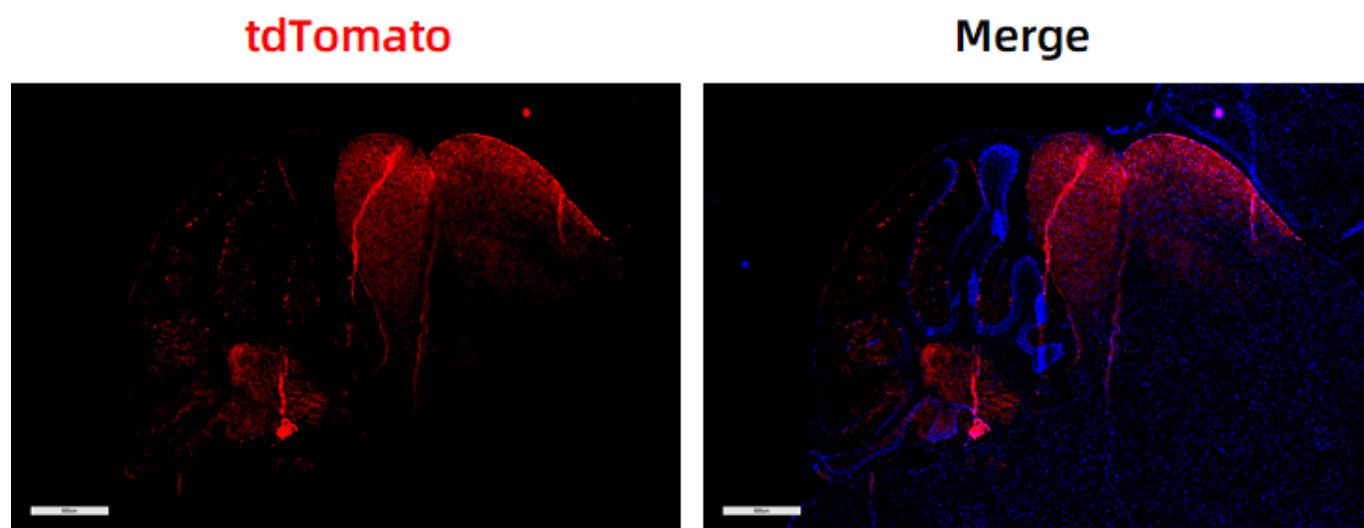


Fig. 1 Dre-mediated recombination in the brain of $Wnt1^{Dre/+}$; $Rosa26^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in the cerebellar purkinje cells and epithalamus cells of $Wnt1^{Dre/+}$; $Rosa26^{tdTomato/+}$ mouse.

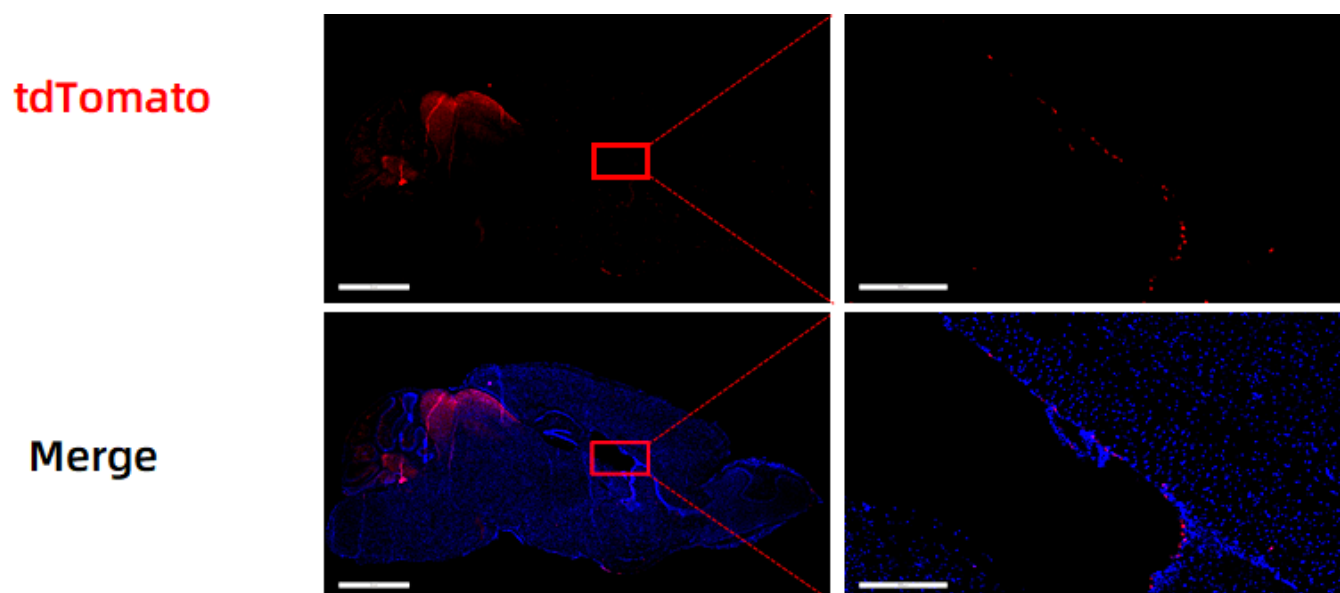


Fig. 2 Dre-mediated recombination in the brain of $Wnt1^{Dre/+}$; $Rosa26^{tdTomato/+}$ mouse. TdTomato(red) expression can be detected in some cells of the ventricle of $Wnt1^{Dre/+}$; $Rosa26^{tdTomato/+}$ mouse.

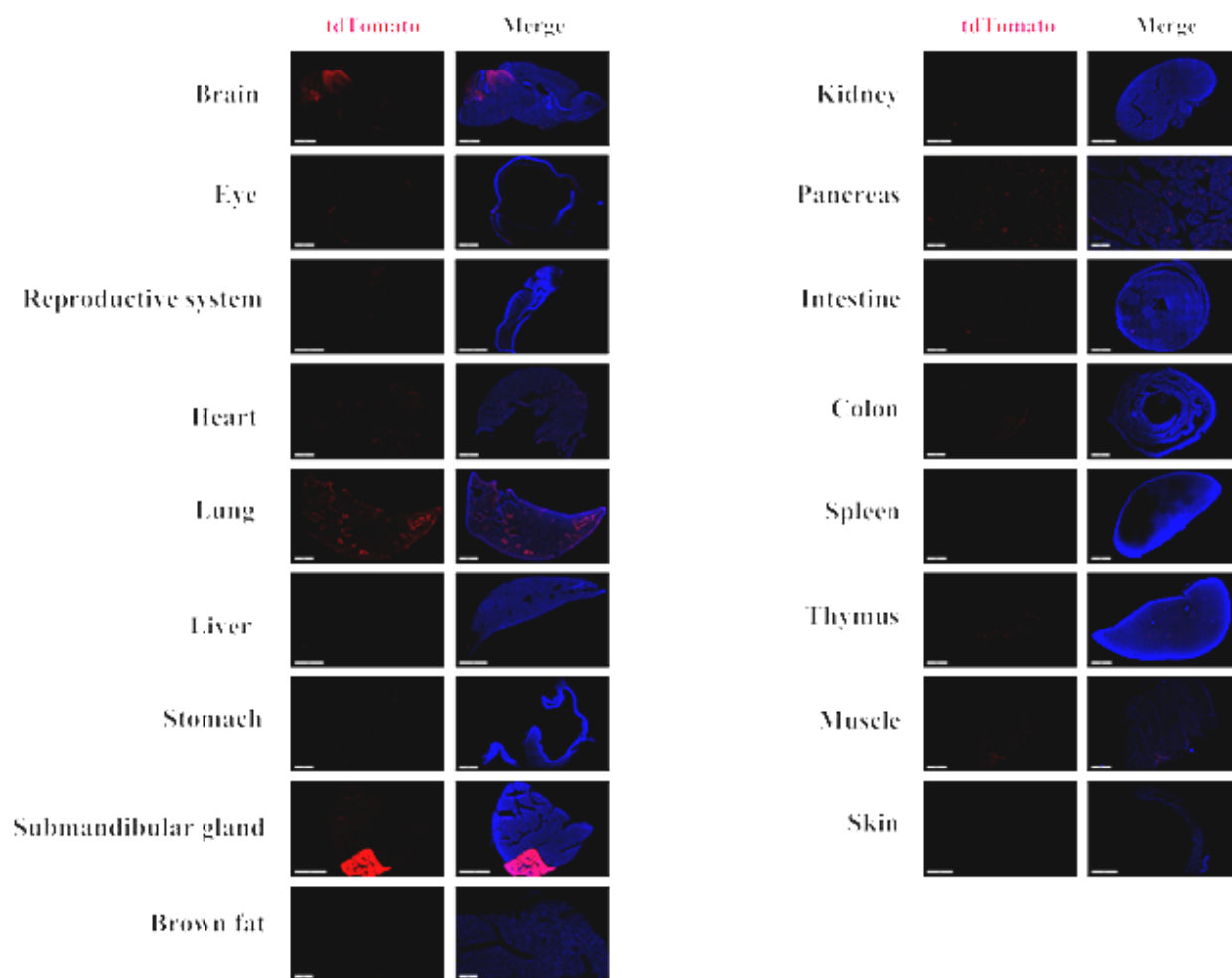


Fig. 3 Detection of tdTomato(red) in various tissues of $Wnt1^{Dre/+}; Rosa26^{tdTomato/+}$ mice. Dre mediated recombination can be detected in some cells of the lung, salivary gland, brain, eyes, stomach, thymus, colon, intestinal crypt, ovary, liver and pancreas. Tdtomato expression can not be observed in the brown fat, heart, kidney, spleen or muscle. (For more detailed information please contact our technical advisor.)