

Sox9-IRES-CreERT2

Nomenclature	C57BL/6Smoc- <i>Sox9</i> ^{em(IRES-CreERT2-SV40pA)Smoc}
Cat. NO.	NM-KI-204996
Strain State	Repository Live

Gene Summary

Gene Symbol Sox9	Synonyms	AV220920; mKIAA4243; 2010306G03Rik
	NCBI ID	20682
	MGI ID	98371
	Ensembl ID	ENSMUSG00000000567
	Human Ortholog	SOX9

Model Description

IRES-CreERT2-SV40pA expression cassette was knocked into the Sox9 gene .

Research Application: These mice may be used to generate tamoxifen-induced conditional mutations for studying gain-or-loss of function and/or fate mapping related to Sox9 expression during stem cell differentiation.

*Literature published using this strain should indicate: Sox9-IRES-CreERT2 mice (Cat. NO. NM-KI-204996) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

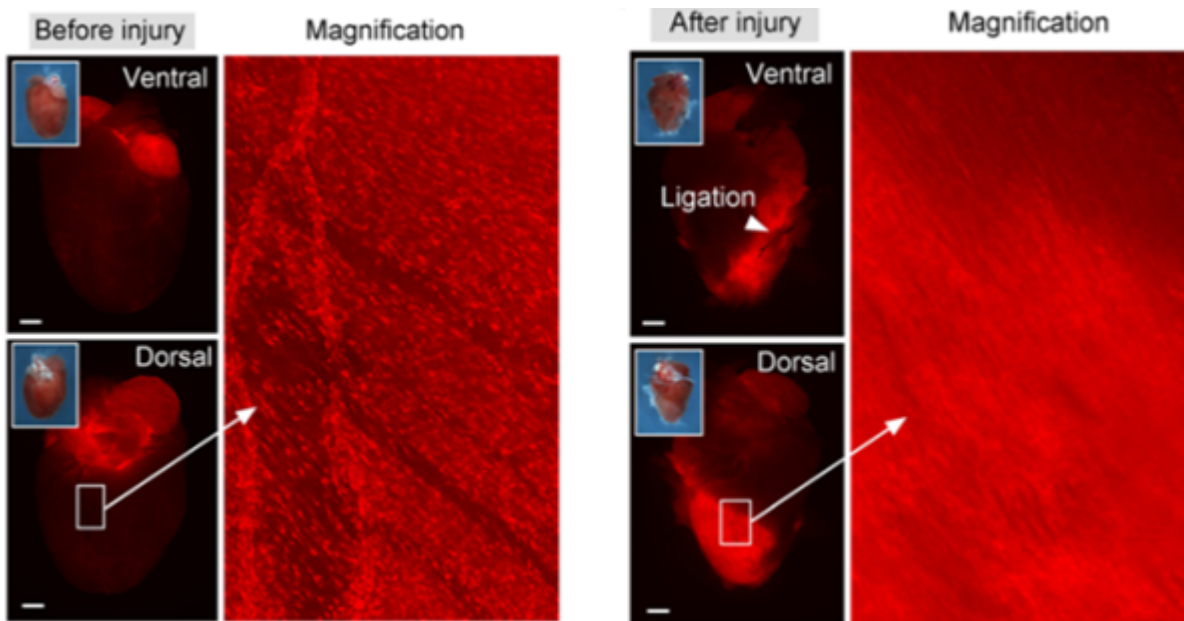


Fig. 1 CreERT2-mediated recombination in the heart of Sox9^{CreERT2/+}; R26^{tdtomato/+} mouse. TdTomato can be detected in the heart of Sox9^{CreERT2/+}; R26^{tdtomato/+} mouse. (Documented in the following reference.)

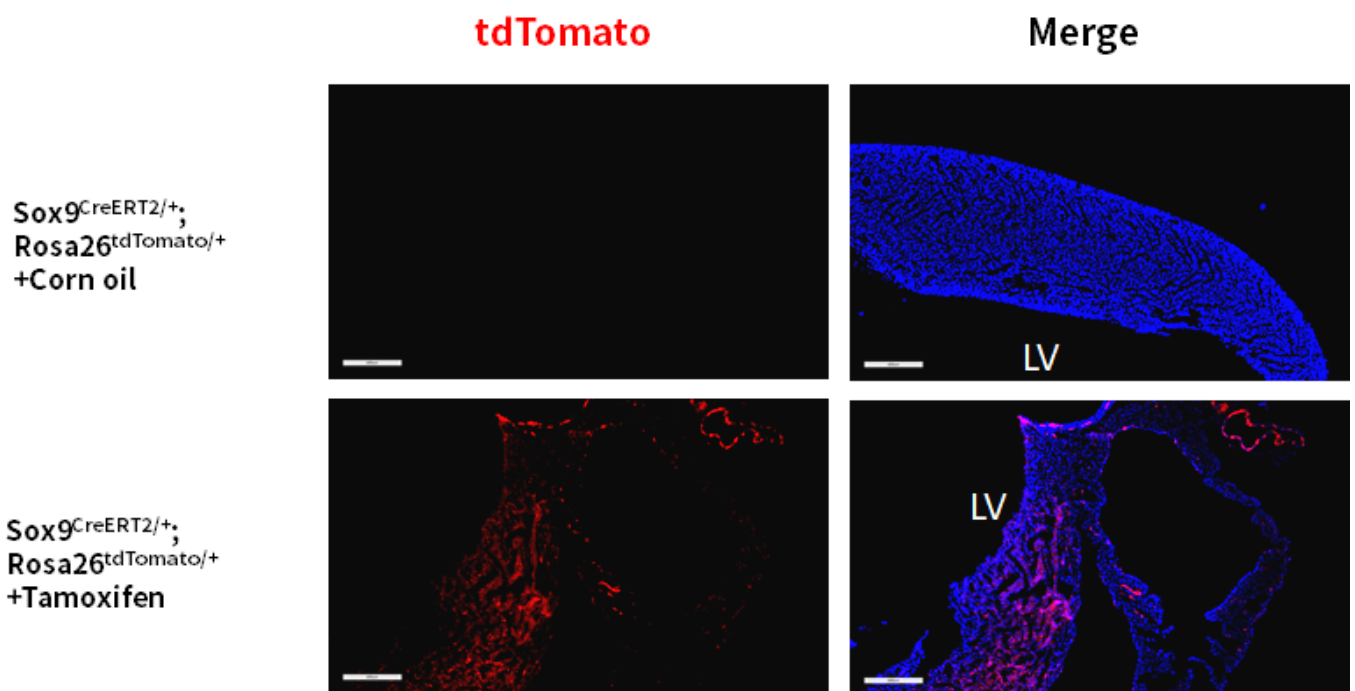


Fig. 2 CreERT2-mediated recombination in the heart of Sox9^{CreERT2/+}; Rosa26^{tdTomato/+} mouse. TdTomato(red) expression can be detected in some cells of ventricle and atria derived from Sox9^{CreERT2/+}; Rosa26^{tdTomato/+} mouse after tamoxifen treatment.

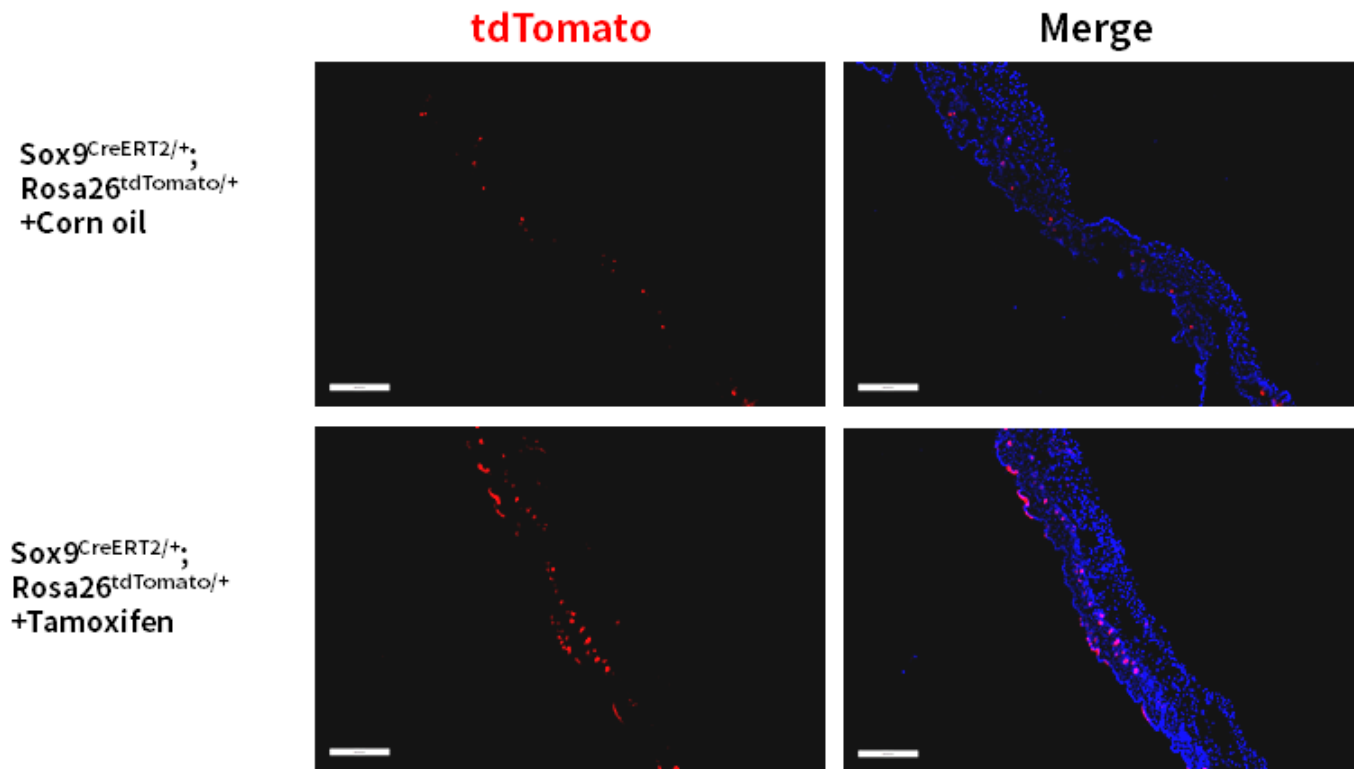


Fig. 3 CreERT2-mediated recombination in the hair follicles of Sox9^{CreERT2/+}; Rosa26^{tdTomato/+} mouse. TdTomato(red) expression can be detected in the hair follicles and epidermis derived from Sox9^{CreERT2/+}; Rosa26^{tdTomato/+} mouse.

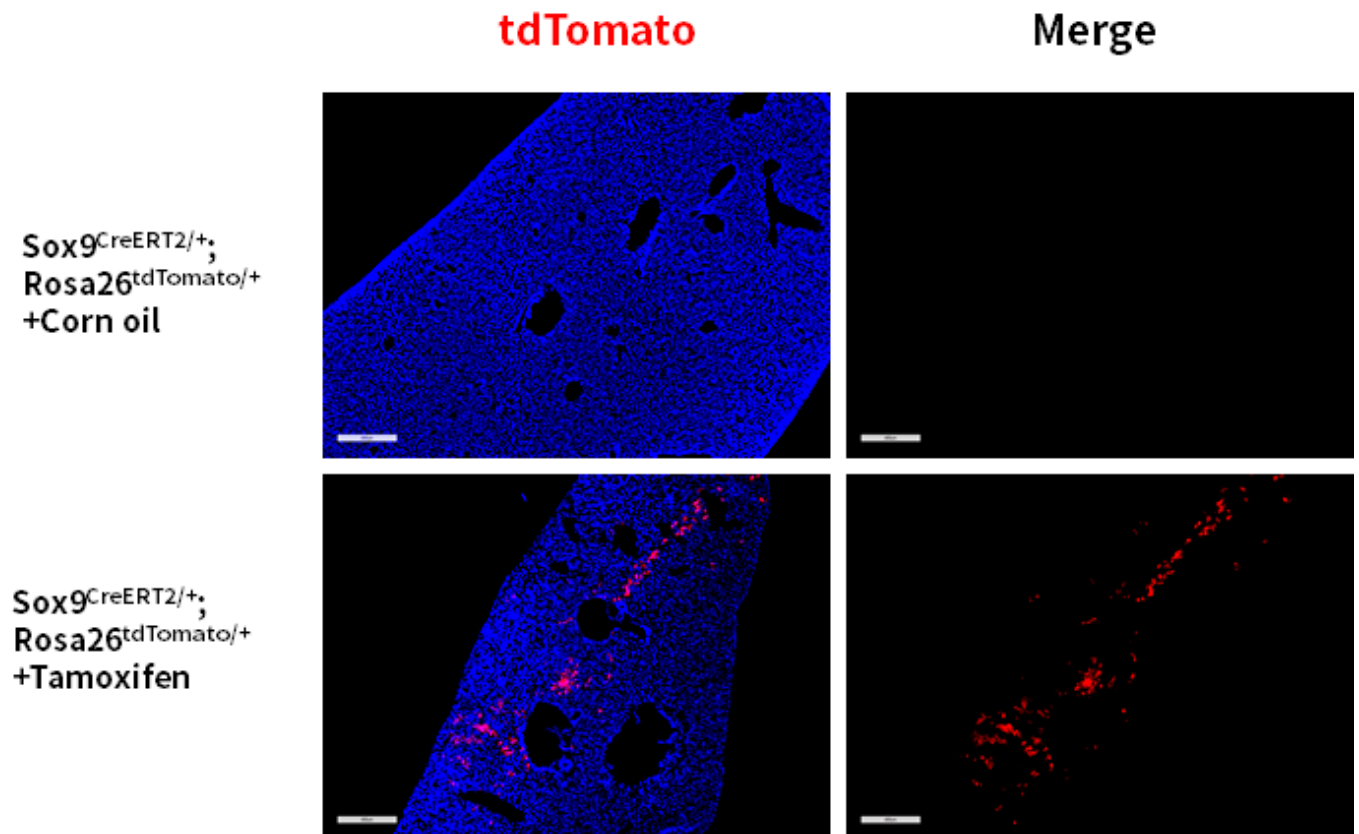


Fig. 4 CreERT2-mediated recombination in the liver of Sox9^{CreERT2/+}; Rosa26^{tdTomato/+} mouse. TdTomato(red) expression can be detected in the liver of Sox9^{CreERT2/+}; Rosa26^{tdTomato/+} mouse.

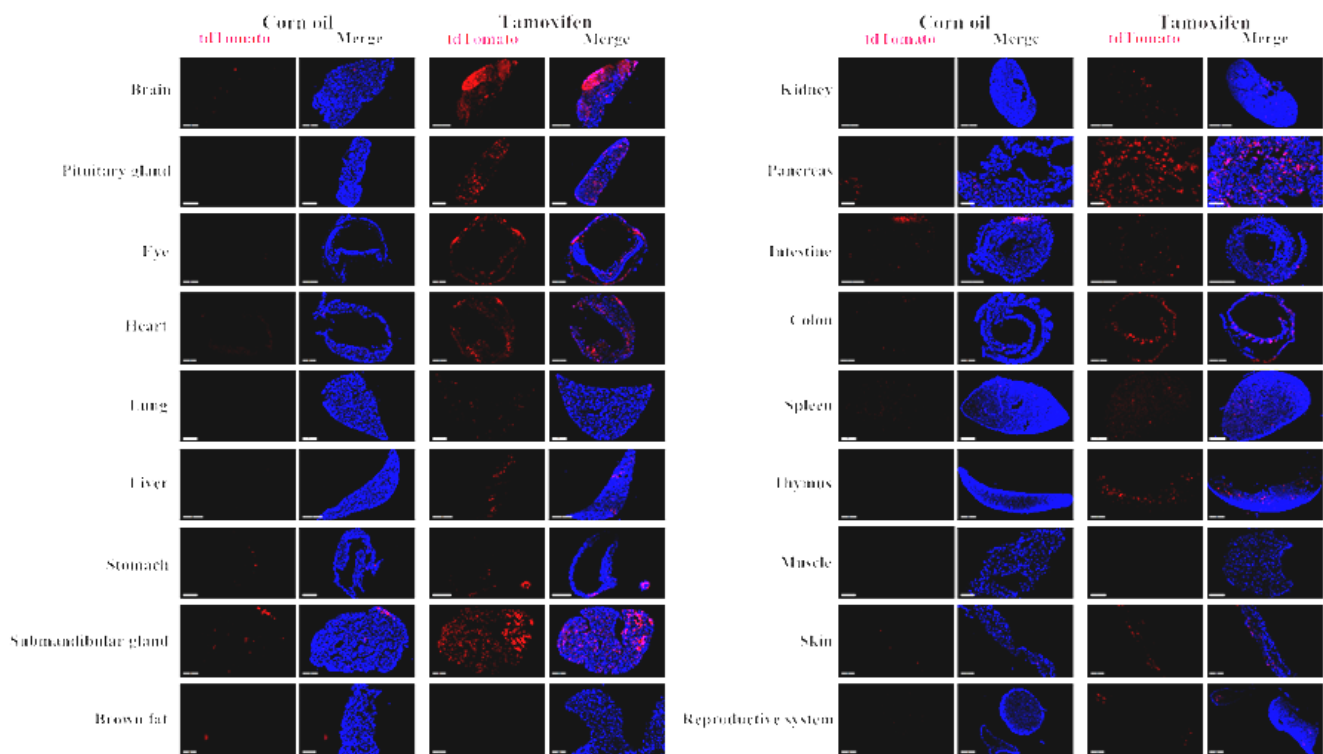


Fig. 5 Detection of tdTomato(red) in various tissues of Sox9^{CreERT2/+}; Rosa26^{tdTomato/+} mice. CreERT2 mediated recombination can be detected in the heart, hair follicles and epidermis. Tdtomato expression can be also detected in individual cells derived from liver, brain, pituitary gland, retina, stomach, large intestine, small intestine, lung, submandibular gland, kidney, pancreas, spleen, thymus and ovary, except for brown fat tissue and muscle. (For more detailed information please contact our technical advisor.)

Publications

[Preexisting endothelial cells mediate cardiac neovascularization after injury](#)

References: J Clin Invest