

Nkx2-1-CreERT2

Nomenclature	C57BL/6Smoc- <i>Nkx2-1</i> ^{em1(CreERT2-pA)Smoc}
Cat. NO.	NM-KI-200123
Strain State	Sperm cryopreservation

Gene Summary

Gene Symbol Nkx2-1	Synonyms	T/EBP; Titf1; Ttf-1; Nkx2.1; AV026640
	NCBI ID	21869
	MGI ID	108067
	Ensembl ID	ENSMUSG000000001496
	Human Ortholog	NKX2-1

Model Description

A CreERT2-pA expression cassette was knocked into the Nkx2-1 gene start codon site. Nkx2-1, a key molecule in lung development, is expressed in adult bronchial and alveolar type II epithelial cells. Besides, Nkx2-1 expression as a prognostic marker is also been applied to lung cancer research including lung adenocarcinoma.

Research Application: Cre recombinase tool

*Literature published using this strain should indicate: Nkx2-1-CreERT2 mice (Cat. NO. NM-KI-200123) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

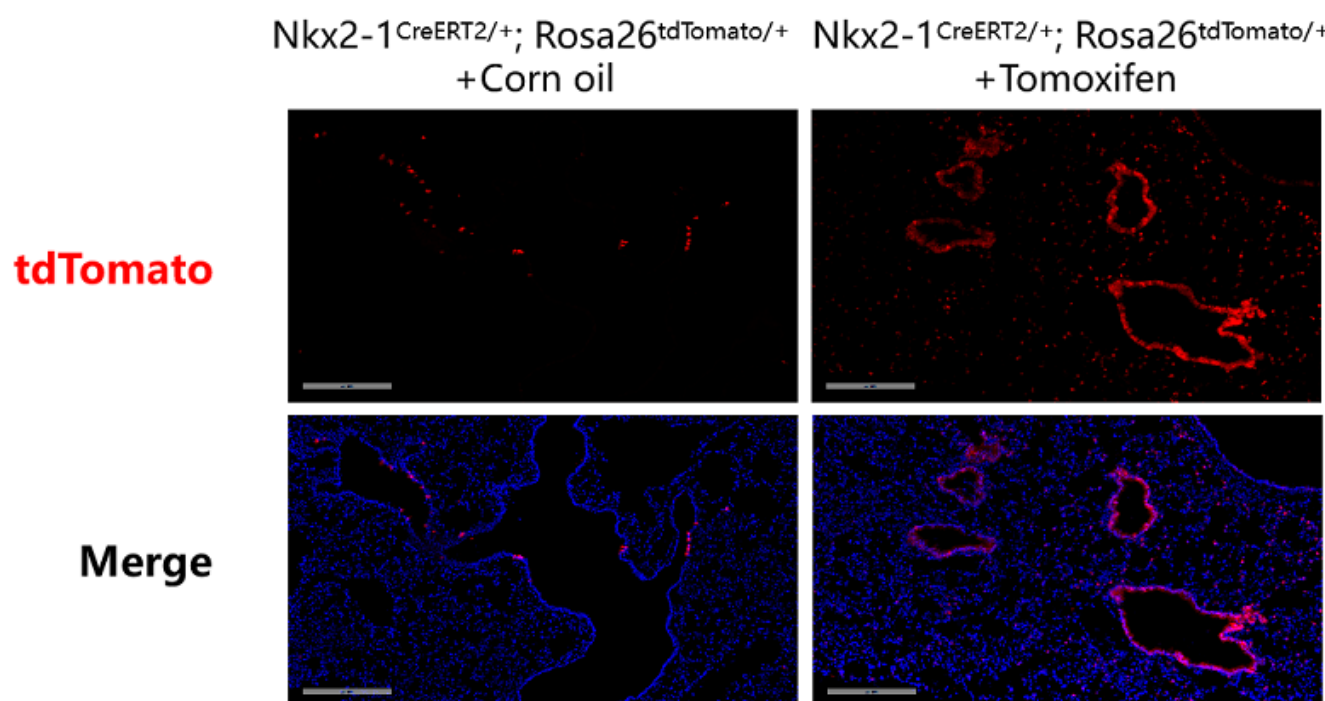


Fig. 1 Detection of tdTomato (red) in the pulmonary epithelial cells of Nkx2-1^{CreERT2/+}; Rosa26^{tdTomato/+} mouse after tamoxifen treatment. CreERT2-mediated recombination in some of the bronchial and alveolar epithelial cells of Nkx2-1^{CreERT2/+}; Rosa26^{tdTomato/+} mouse can be induced by tamoxifen.

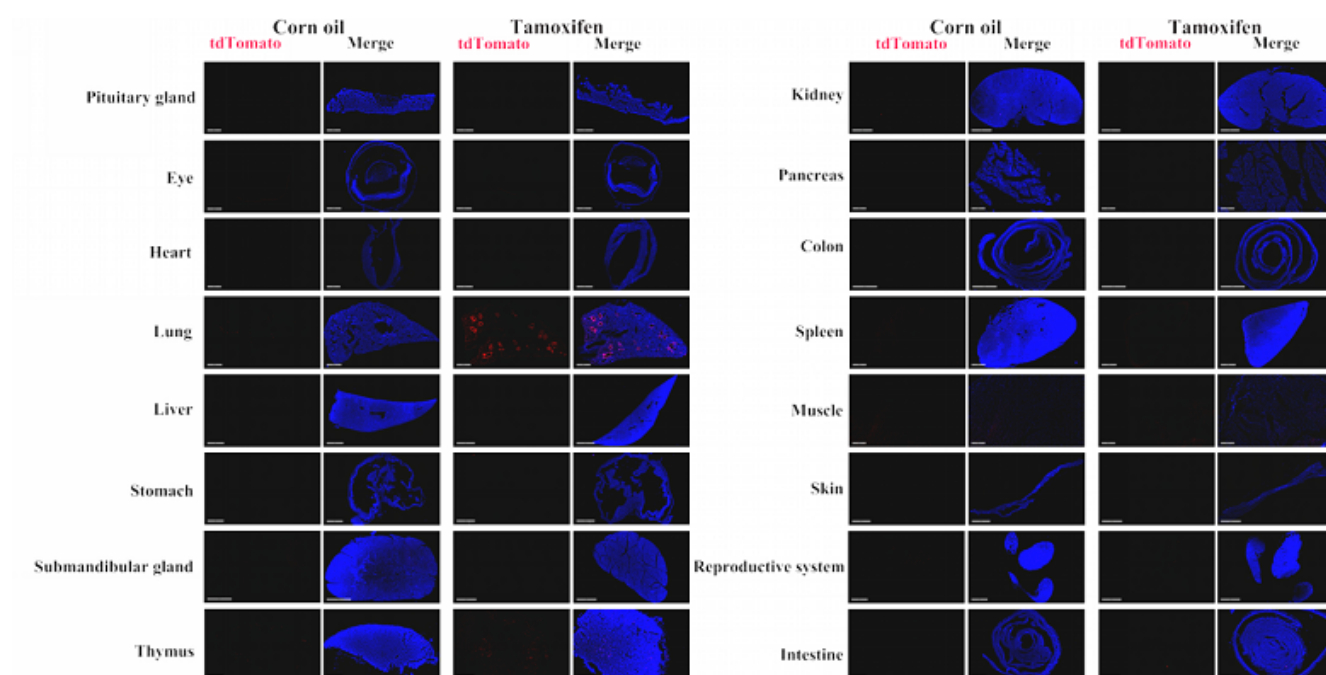


Fig. 2 Detection of tdTomato (red) in various tissues of Nkx2-1^{CreERT2/+}; Rosa26^{tdTomato/+} mice after tamoxifen treatment. CreERT2-mediated recombination in the lung can be induced by tamoxifen. And tdTomato expression can not be observed in the pituitary gland, retina, heart, liver, stomach, colon, intestine, kidney, pancreas, etc.

