

# Nkx2-1-CreERT2

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

## Gene Summary

|                              |                       |                                       |
|------------------------------|-----------------------|---------------------------------------|
| <b>Gene Symbol</b><br>Nkx2-1 | <b>Synonyms</b>       | T/EBP; Titf1; Ttf-1; Nkx2.1; AV026640 |
|                              | <b>NCBI ID</b>        | <a href="#">21869</a>                 |
|                              | <b>MGI ID</b>         | <a href="#">108067</a>                |
|                              | <b>Ensembl ID</b>     | <a href="#">ENSMUSG000000001496</a>   |
|                              | <b>Human Ortholog</b> | 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

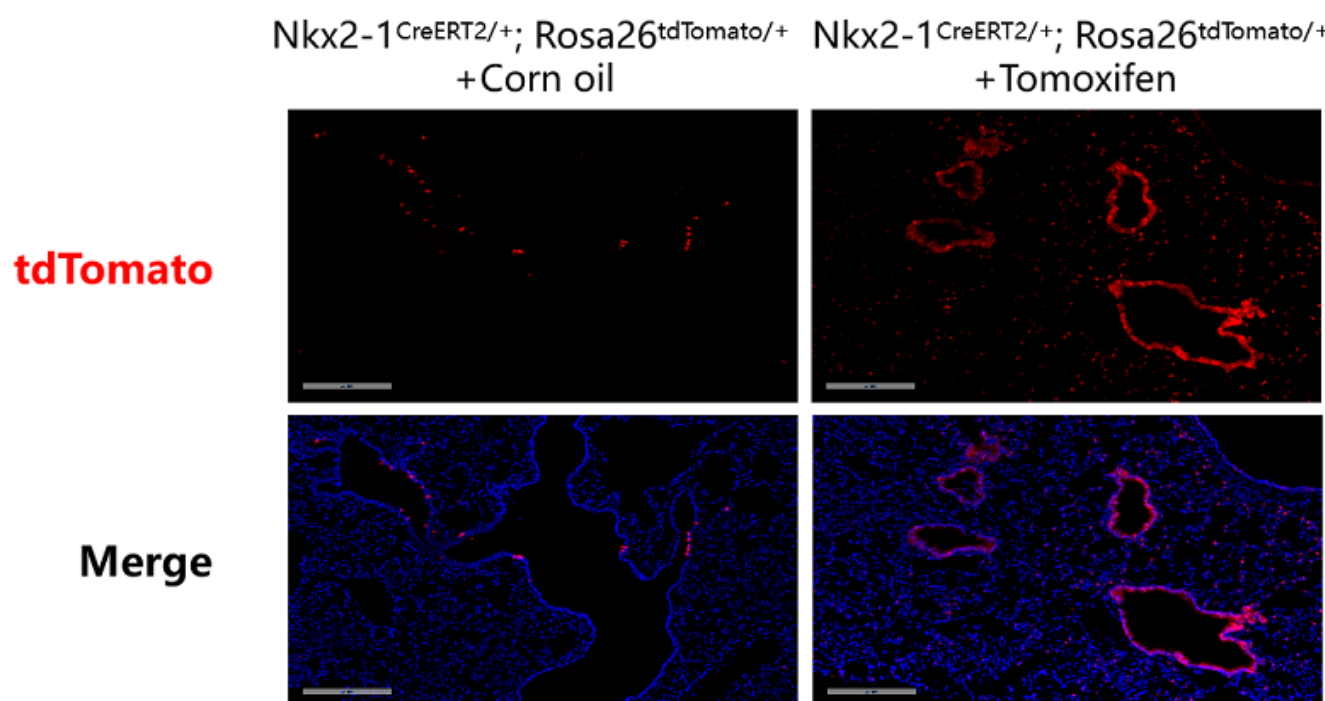


Fig. 1 Detection of tdTomato (red) in the pulmonary epithelial cells of Nkx2-1<sup>CreERT2/+</sup>; Rosa26<sup>tdTomato/+</sup> mouse after tamoxifen treatment. CreERT2-mediated recombination in some of the bronchial and alveolar epithelial cells of Nkx2-1<sup>CreERT2/+</sup>; Rosa26<sup>tdTomato/+</sup>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

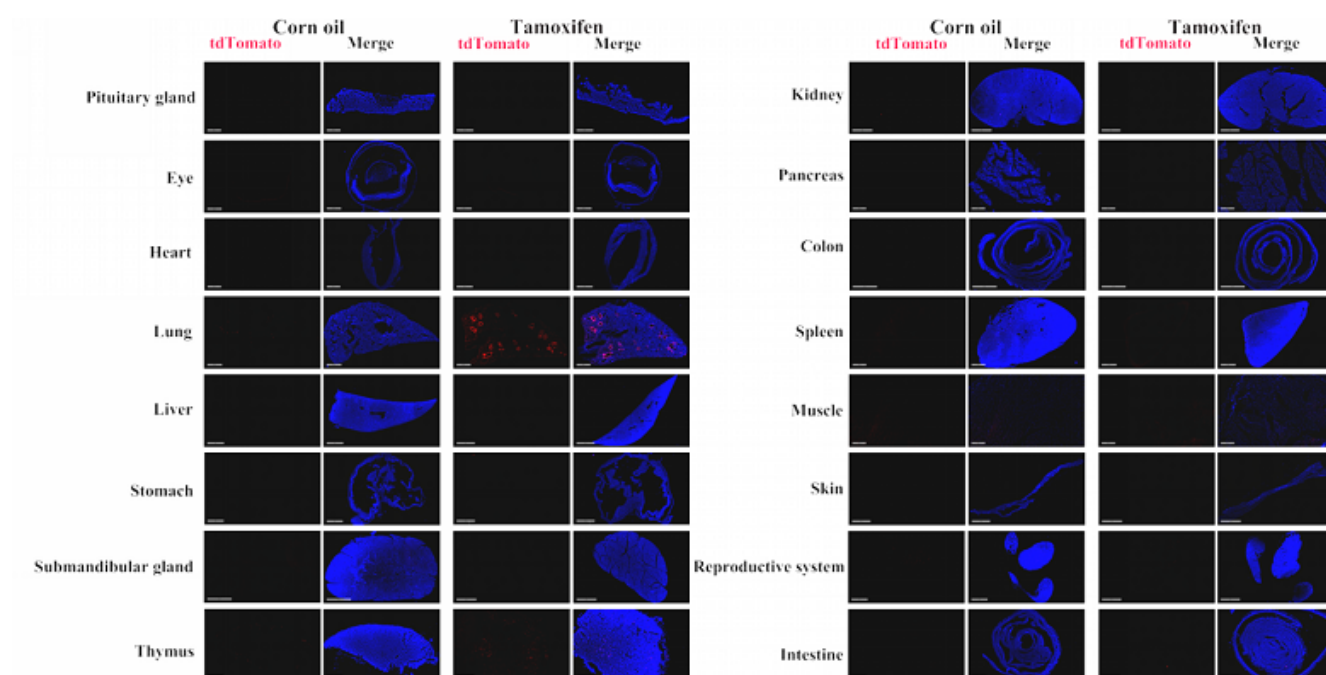


Fig. 2 Detection of tdTomato (red) in various tissues of Nkx2-1<sup>CreERT2/+</sup>; Rosa26<sup>tdTomato/+</sup> mice after tamoxifen treatment. CreERT2-mediated recombination in the lung can be induced by tamoxifen. And tdTomato expression can not be observed in the pituitary gland, retina, heart, liver,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

