

Foxj1-EGFP-CreERT2

Nomenclature	C57BL/6Smoc- <i>Foxj1</i> ^{em1(GFP-CreERT2-polyA)Smoc}
Cat. NO.	NM-KI-200133
Strain State	Repository Live

Gene Summary

Gene Symbol Foxj1	Synonyms	Hfh4; HFH-4; FKHL-13
	NCBI ID	15223
	MGI ID	1347474
	Ensembl ID	ENSMUSG00000034227
	Human Ortholog	FOXJ1

Model Description

A GFP-CreERT2-polyA expression cassette was knocked into the Foxj1 gene start codon site.

Research Application: The expression pattern of GFP-CreERT2 was similar to the endogenous pattern of Foxj1 gene expression. Tamoxifen-induced Cre recombinase activity was detected in the lung and brain. The mouse model can be used for studying hydrocephalus.

*Literature published using this strain should indicate: Foxj1-EGFP-CreERT2 mice (Cat. NO. NM-KI-200133) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

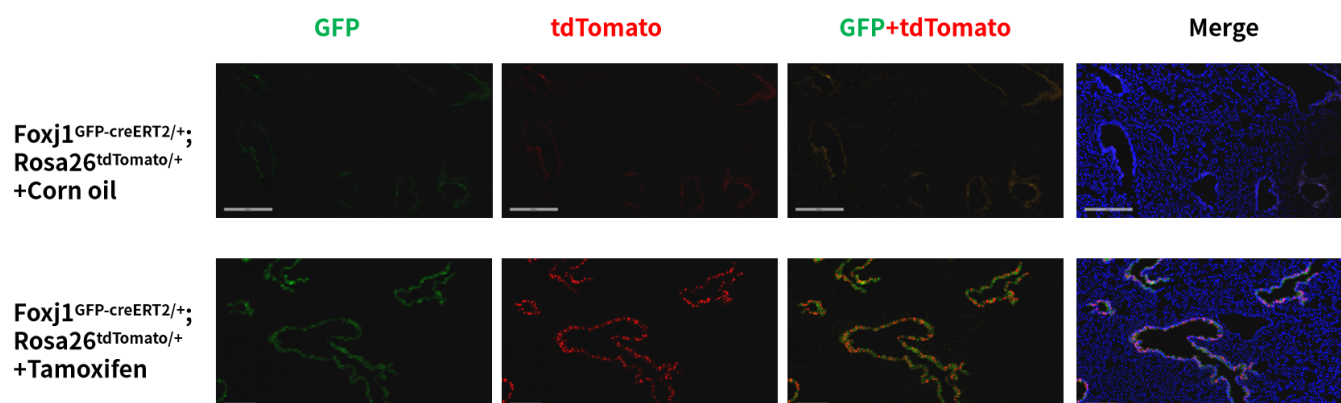


Fig.1 CreERT2-mediated recombination in the lung of $Foxj1^{CreERT2/+}$; $Rosa26^{tdTomato/+}$ mouse.

TdTomato+ cells (red) were colocalized with GFP+ cells (green) in the bronchial epithelial cells of $Foxj1^{CreERT2/+}$; $Rosa26^{tdTomato/+}$ mouse after tamoxifen treatment. Some leakiness were detected in the lung prior to tamoxifen exposure.

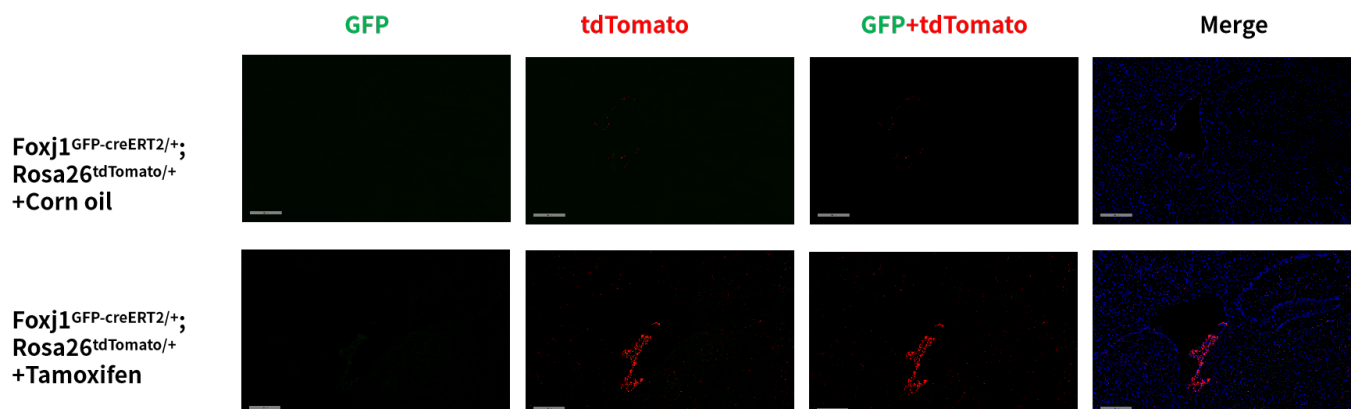


Fig.2 CreERT2-mediated recombination in the brain of $Foxj1^{CreERT2/+}$; $Rosa26^{tdTomato/+}$ mouse.

TdTomato(red) expression can be detected in the choroid plexus of $Foxj1^{CreERT2/+}$; $Rosa26^{tdTomato/+}$ mouse after tamoxifen treatment. Some leakiness were detected in the choroid plexus prior to tamoxifen exposure. EGFP(green) expression can not be observed.

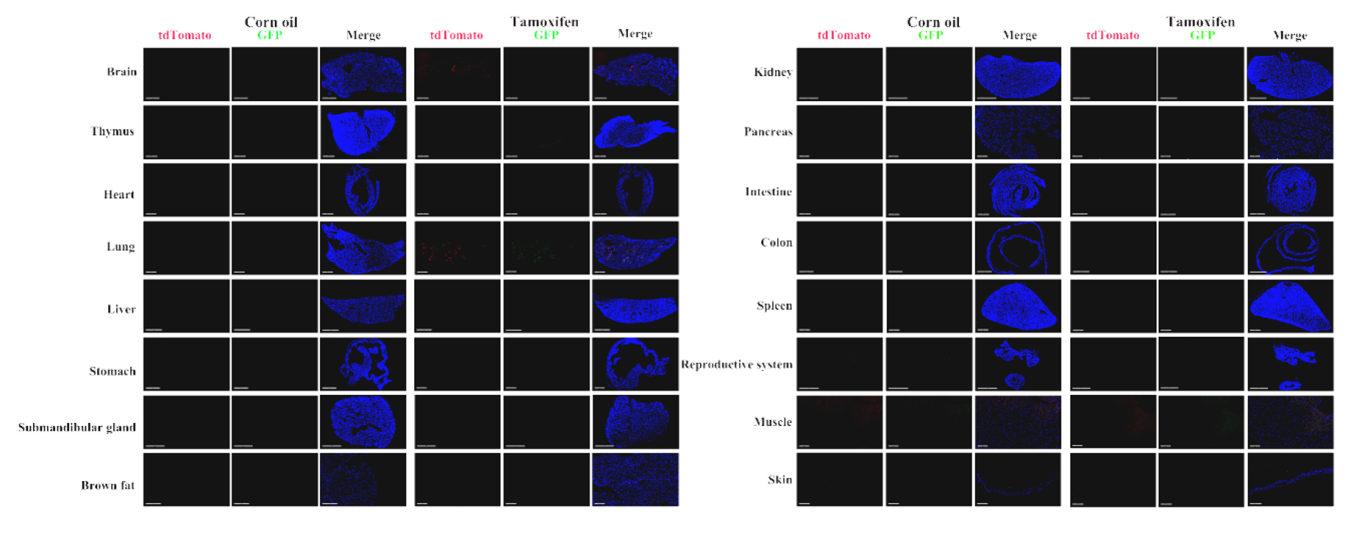


Fig.3 Detection of tdTomato (red) and GFP (green) in various tissues of $Foxj1^{CreERT2/+}$; $Rosa26^{tdTomato/+}$ mice. CreERT2 mediated recombination can not be detected in the thymus, heart, lung, stomach, submandibular gland, brown fats, kidney, pancreas, intestine, colon, spleen, ovary, uterus, muscle or skin of female mice(12-13 weeks old). (For more detailed information please contact our technical advisor.)