

Bhlha15-CreERT2

Nomenclature	C57BL/6Smoc- <i>Bhlha15</i> ^{em1(CreERT2)Smoc}
Cat. NO.	NM-KI-200080
Strain State	Repository Live

Gene Summary

Gene Symbol Bhlha15	Synonyms	Mist1; Bhlhb8; MIST-1; 1810009C13Rik
	NCBI ID	17341
	MGI ID	891976
	Ensembl ID	ENSMUSG00000052271
	Human Ortholog	BHLHA15

Model Description

The coding region of Bhlha15 gene was replaced by a CreERT2 expression cassette. Besides, a kozak-CreERT2-WPRE-polyA expression cassette were knock into the Bhlha15 gene start codon site to generate Bhlha15-CreERT2(2)(Stock No. NM-KI-200158) mice. Bhlha15(basic helix-loop-helix family member a15) is also known as Mist1. The gene product is involved in controlling exocrine secretion from the pancreas, small intestine and stomach. When crossed with a strain carrying a gene flanked by loxP sites, the flanked gene will be removed in cells expressing Bhlha15.

Research Application: Cre recombinase tool, pancreatic acinar cells

*Literature published using this strain should indicate: Bhlha15-CreERT2 mice (Cat. NO. NM-KI-200080) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

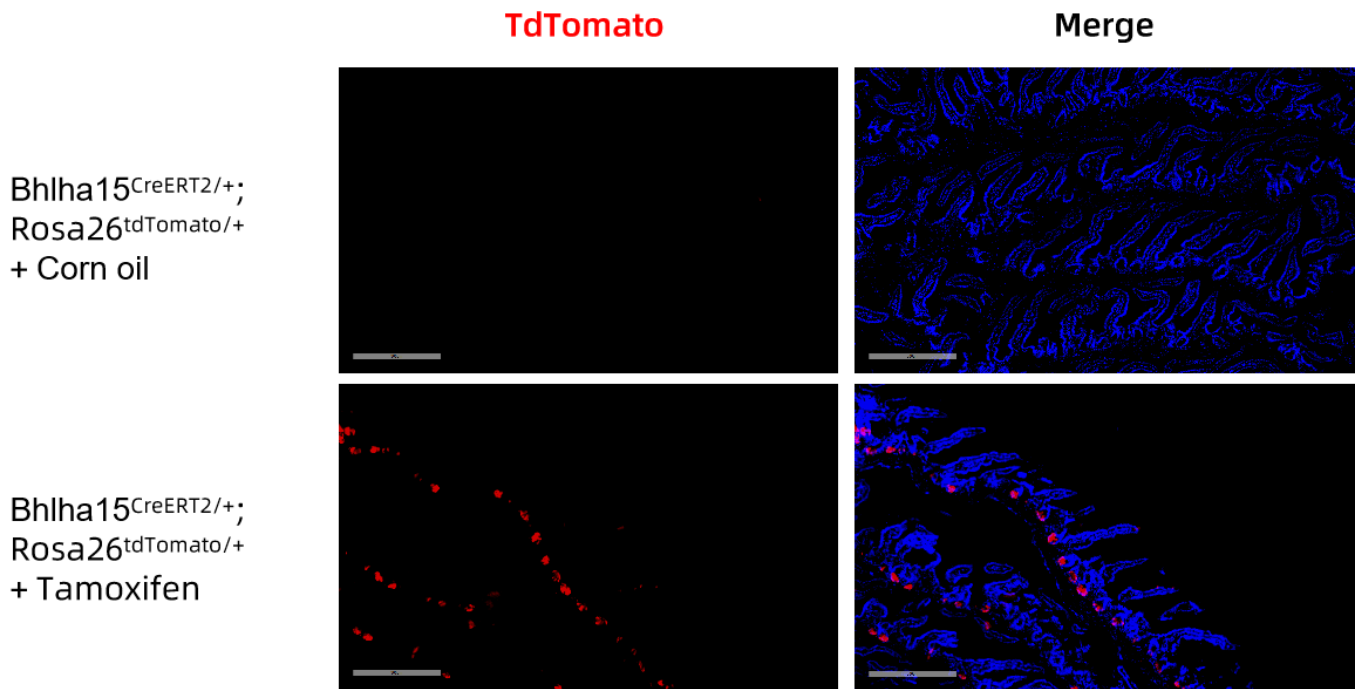


Fig. 1 CreERT2-mediated recombination in the intestine of Bhlha15^{CreERT2/+}; Rosa26^{tdTomato/+} mouse. TdTomato(red) expression can be detected in the crypt of Bhlha15^{CreERT2/+}; Rosa26^{tdTomato/+} mouse after tamoxifen treatment.

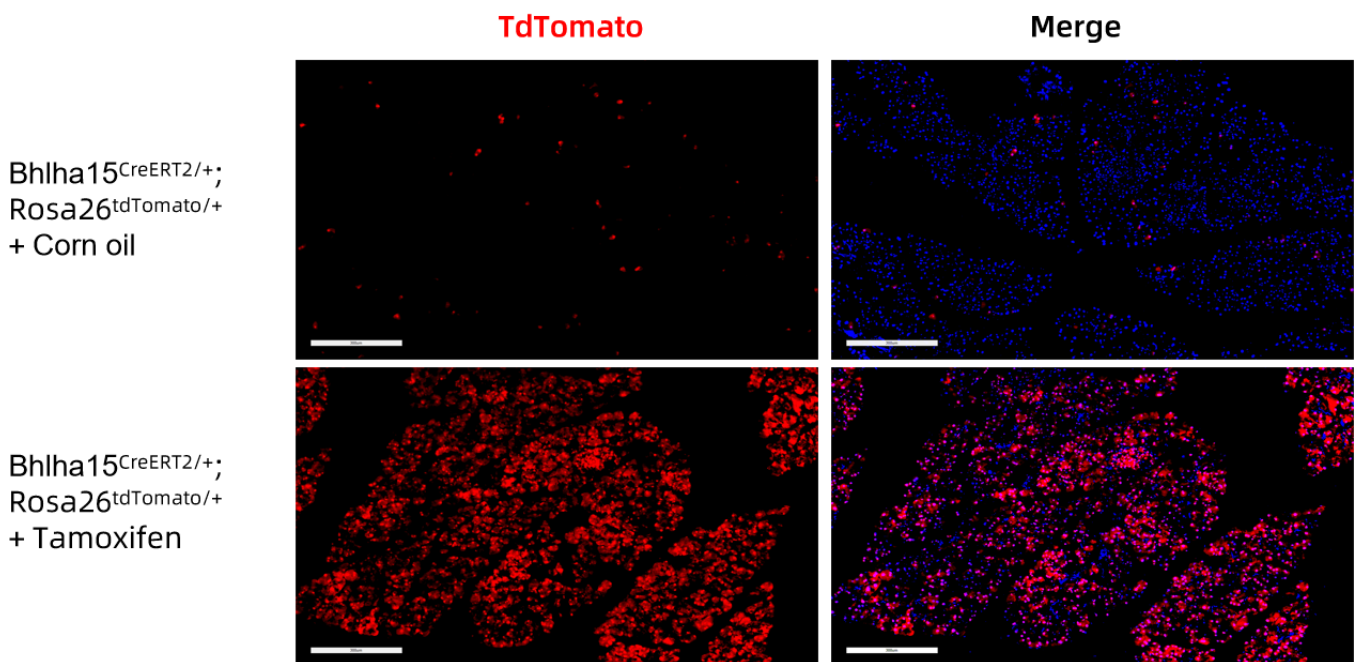


Fig. 2 CreERT2-mediated recombination in the pancreas of Bhlha15^{CreERT2/+}; Rosa26^{tdTomato/+} mouse. TdTomato(red) expression can be detected in the pancreas of Bhlha15^{CreERT2/+}; Rosa26^{tdTomato/+} mouse after tamoxifen treatment. Some leakiness can be detected in the pancreas prior to tamoxifen treatment.

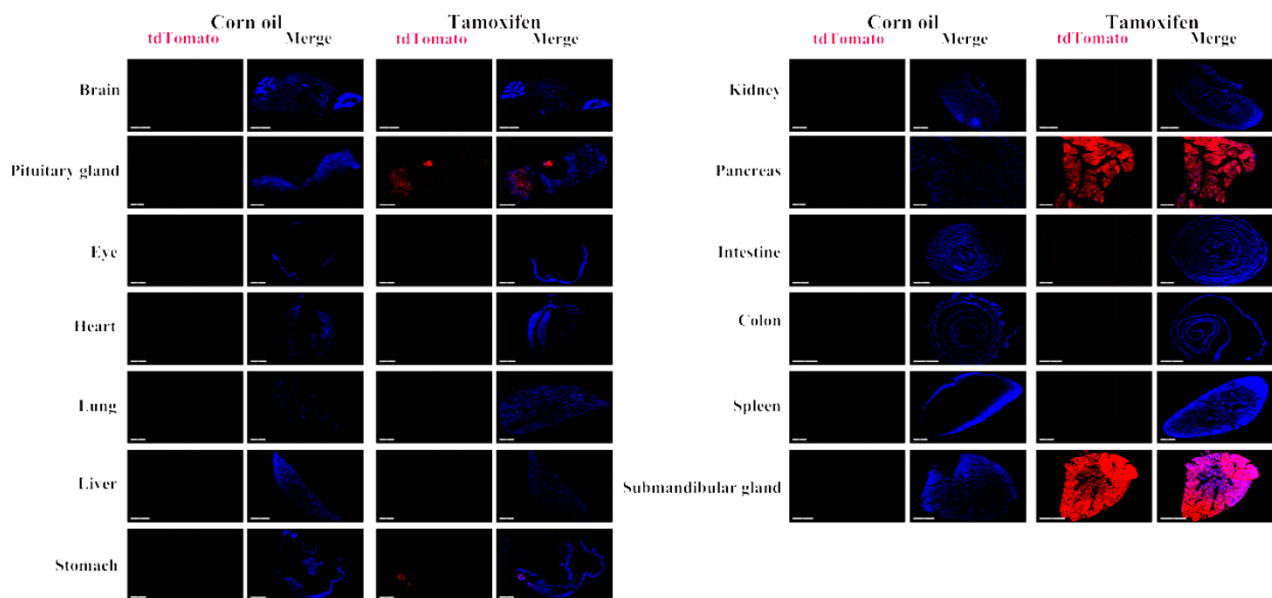


Fig. 3 Detection of tdTomato(red) in various tissues of $Bhlha15^{CreERT2/+}; Rosa26^{tdTomato/+}$ mice. Tdtomato is expressed in the pancreas, pituitary, stomach, crypt, salivary gland, lung, spleen, liver and kidney after tamoxifen treatment. Some leakiness can be detected in the salivary gland and pancreas prior to tamoxifen treatment. Tdtomato expression can not be observed in the brain, colon, heart, retina and skin. (For more detailed information please contact our technical advisor.)