

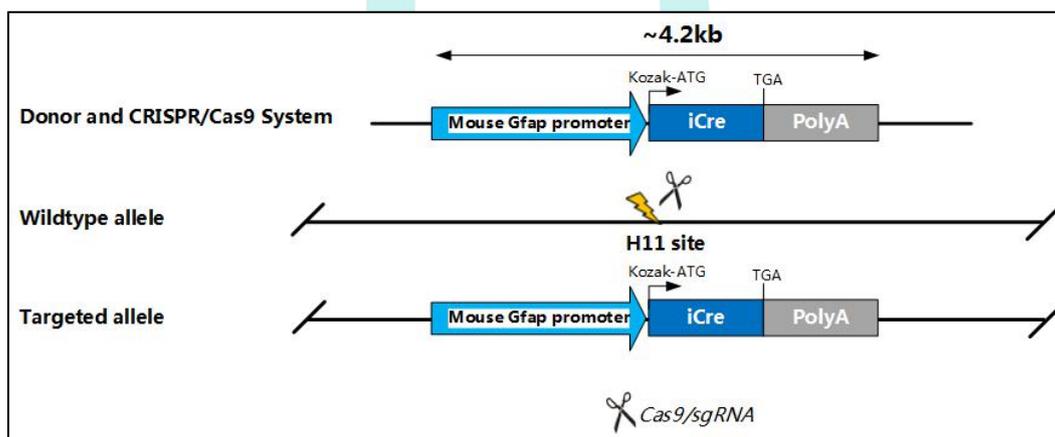
Strain information

Strain number	T004857	Strain name	B6/JGpt- <i>H11</i> ^{em1} Cin(GFAP-iCre)/Gpt
Strain type	Cas9 KI	abbreviation	GFAP-Cre
background	C57BL/6JGpt	Source	GemPharmatech

一、 Application

It can be used as a Cre tool mouse for specific induction of LoxP recombination by neuroastrocytes.

二、 Description



This mouse strain expresses Cre recombinase under the control of the mouse *Gfap*. When crossed with a strain containing *loxP* site flanked sequence, Cre-mediated recombination results in target deletion of the gene fragment between the two LoxP in neuroastrocytes.

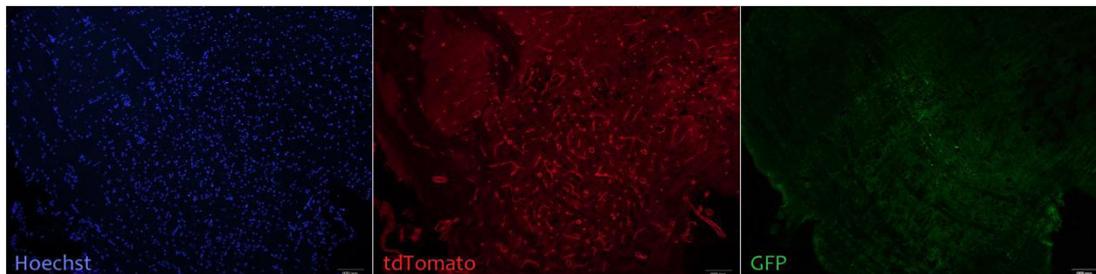
Cas9 technology was used for site-point integration to the H11 site, and the H11 site had significant advantages as the insertion site of KI: 1. the transferred gene was site-point integration to the chromosome, so the passage was stable and no loss of expression was caused by passage; 2. the interference effect of adjacent sequences on the genome can be avoided; 3. the insertion of exogenous genes into this site will not damage any endogenous genes, and the growth and development of mice are normal, without affecting the phenotype and function of mice.

三、 Data

Detection method:

Rosa26-loxP-tdtomato-loxP-GFP mice expressed red fluorescence, and when mated with mice expressing cre recombinant enzyme, and the offspring expressed green fluorescence. Green fluorescence expression could be observed through frozen section , thus confirming the expression of cre protein in neuroastrocytes.

Brain:




GemPharmatech