

Foxp3-IRES-tdTomato-2A-Cre

Nomenclature	C57BL/6Smoc- <i>Foxp3</i> ^{em3(IRES-tdTomato-2A-iCre)Smoc}
Cat. NO.	NM-KI-190119
Strain State	Repository Live

Gene Summary

Gene Symbol Foxp3	Synonyms	sf; JM2; scurfin
	NCBI ID	20371
	MGI ID	1891436
	Ensembl ID	ENSMUSG00000039521
	Human Ortholog	FOXP3

Model Description

A IRES-tdTomato-2A-Cre expression cassette was knocked into the Foxp3 gene stop codon site. This strain is useful in studying regulatory T cell in autoimmunity, especially in type 1 diabetes.

Research Application: Tool Mice

*Literature published using this strain should indicate: Foxp3-IRES-tdTomato-2A-Cre mice (Cat. NO. NM-KI-190119) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

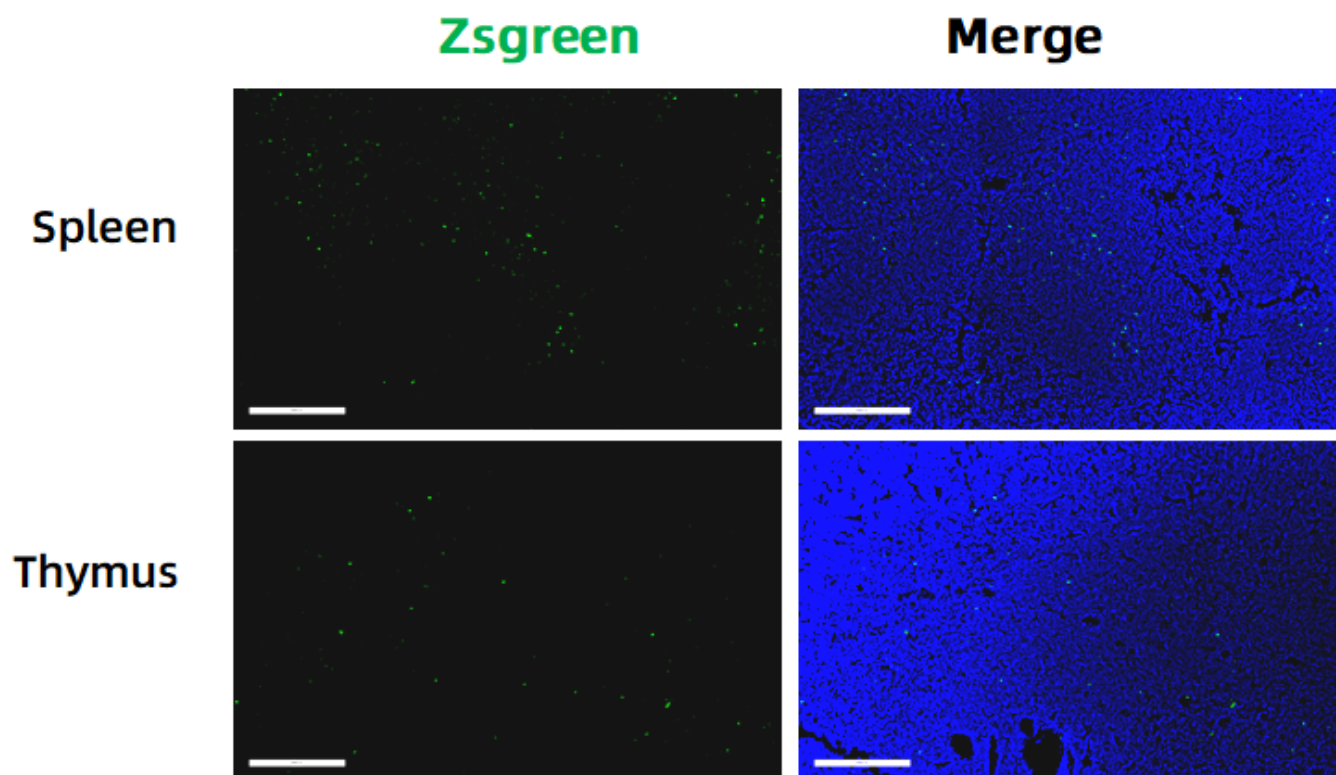


Fig. 1 Cre-mediated recombination in the spleen and thymus of $\text{Foxp3}^{\text{Cre/+}}$; $\text{Rosa26}^{\text{ZsGreen/+}}$ mouse. ZsGreen(green) expression can be detected in the spleen and thymus of $\text{Foxp3}^{\text{Cre/+}}$; $\text{Rosa26}^{\text{ZsGreen/+}}$ mouse, while tdTomato(red) expression can not be detected.

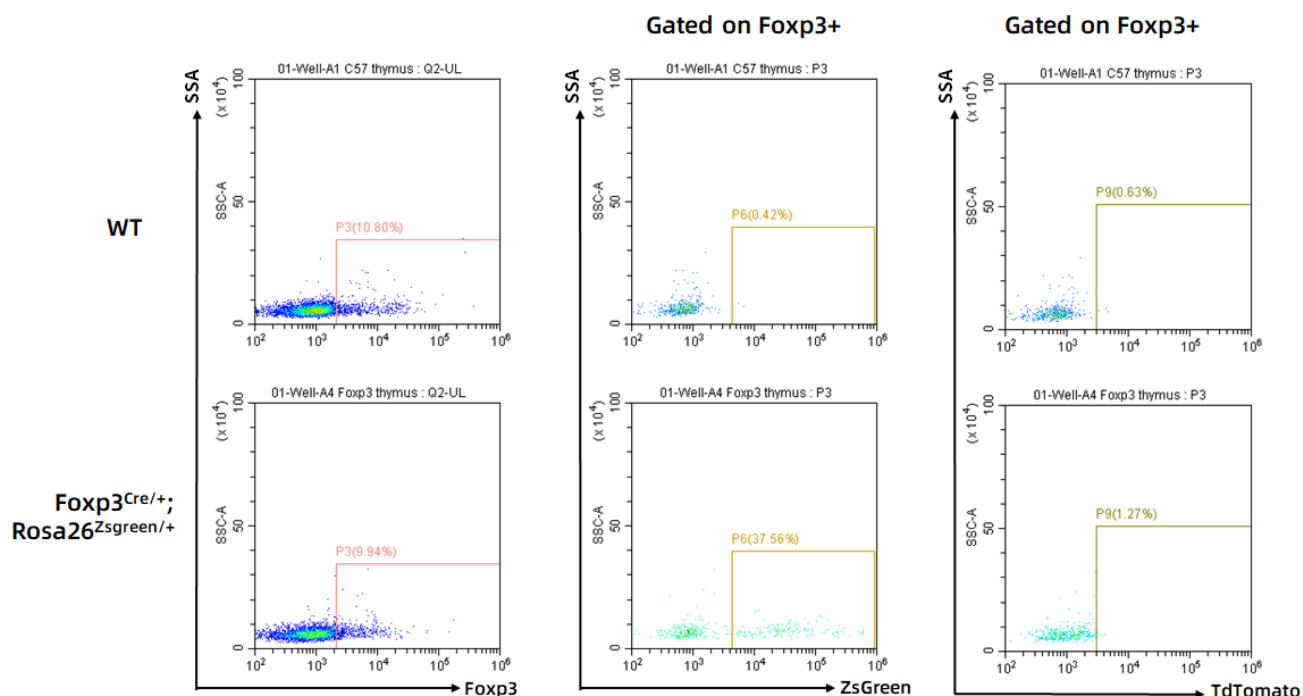


Fig. 2 Flow cytometry analysis of ZsGreen and tdTomato expression in the Foxp3^+ cell derived from the thymus of mice. ZsGreen⁺ cells accounted for 37.56% of Foxp3^+ cells in the thymus of $\text{Foxp3}^{\text{Cre/+}}$; $\text{Rosa26}^{\text{ZsGreen/+}}$ mouse, while tdTomato⁺ cells accounted for 1.27%.

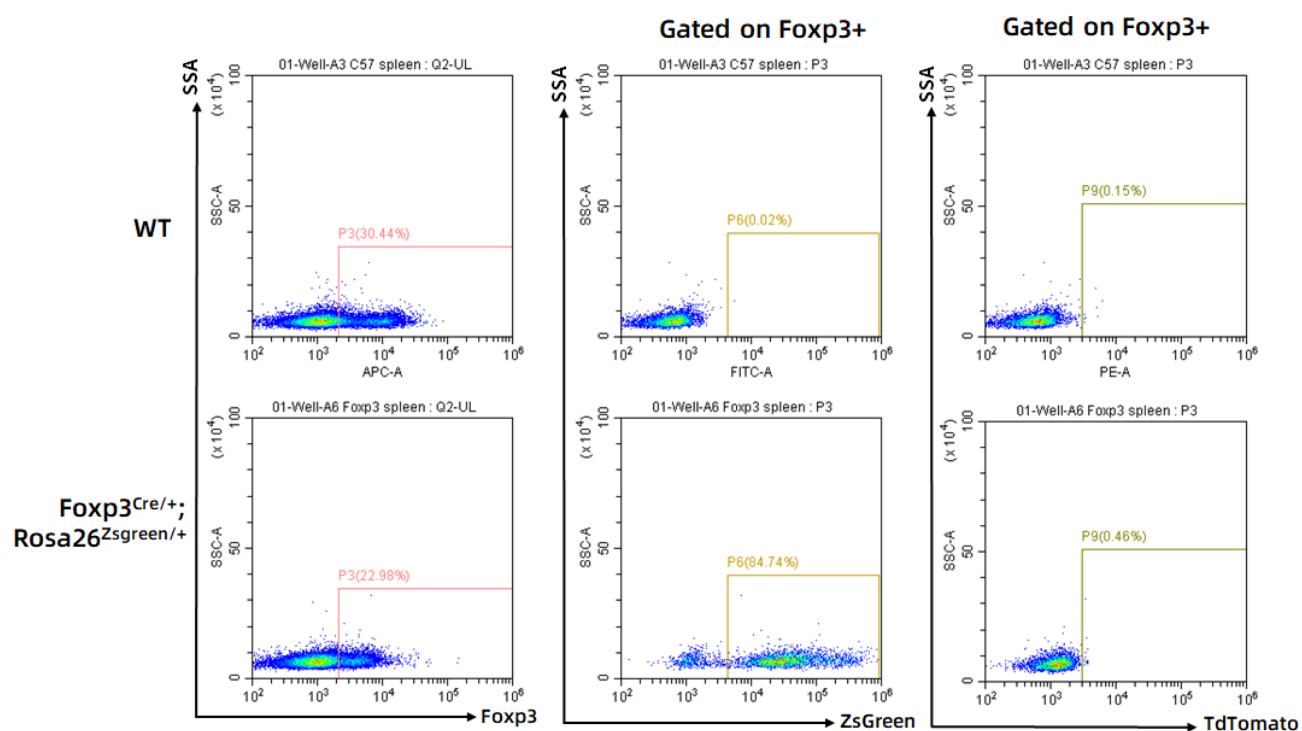


Fig. 3 Flow cytometry analysis of zsGreen and tdTomato expression in the Foxp3⁺ cell derived from the spleen of mice. ZsGreen⁺ cells accounted for 84.74% of Foxp3⁺ cells in the spleen of Foxp3^{Cre/+}; Rosa26^{ZsGreen/+} mouse, while tdTomato⁺ cells accounted for 0.46%.

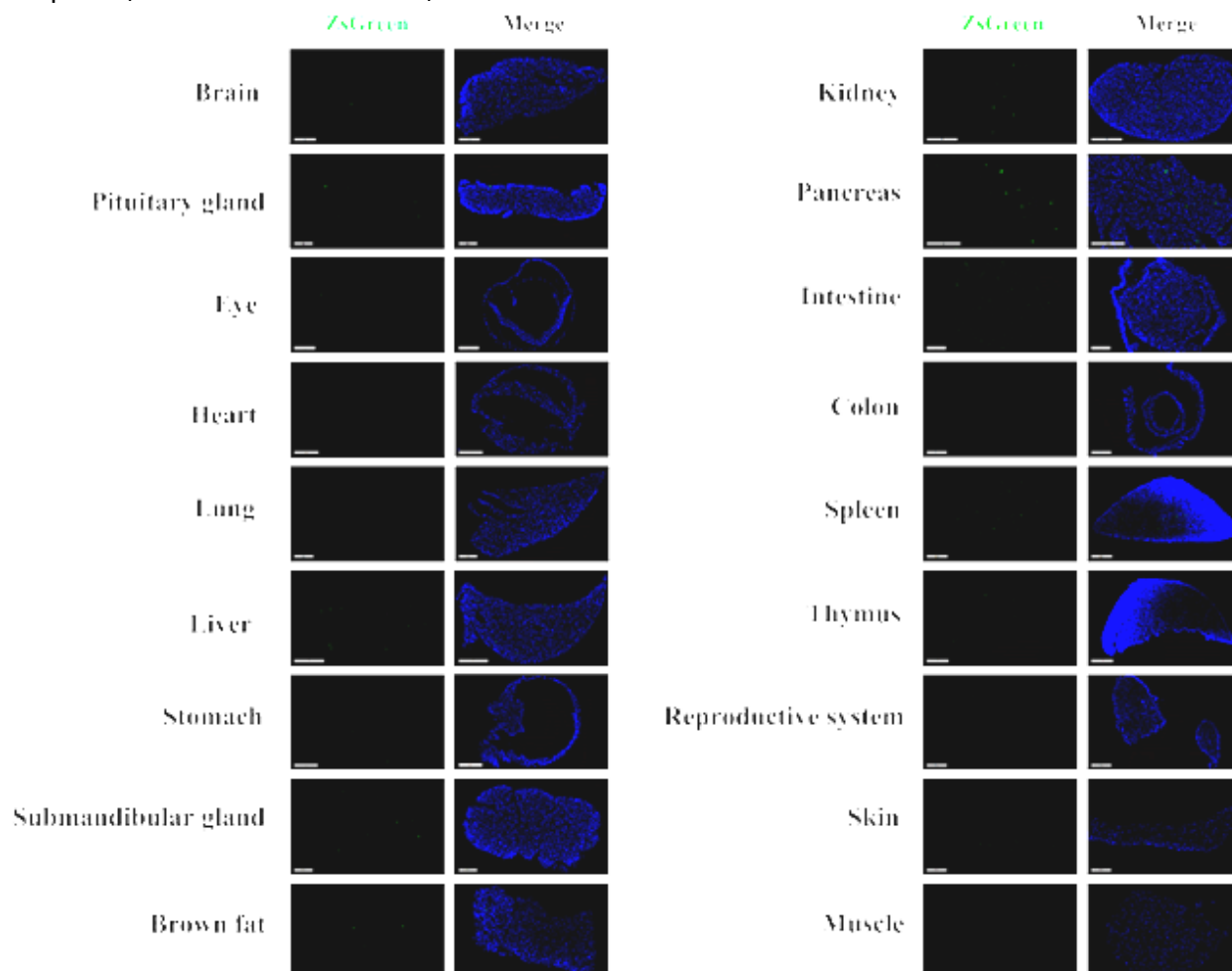


Fig. 4 ZsGreen was also expressed in the mesenteric lymph nodes, pancreas and liver. There was a small amount of expression in the brain, pituitary gland, retina, lung, stomach, kidney, submandibular gland, brown fat, ovary and skin, and no expression in the heart, colon and muscle. (For more information please contact: 400-728-0660.)
