

Foxp3-IRES-tdTomato-2A-Cre

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

Gene Summary

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|------------------------------------|-----------------------|------------------------------------|
| 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

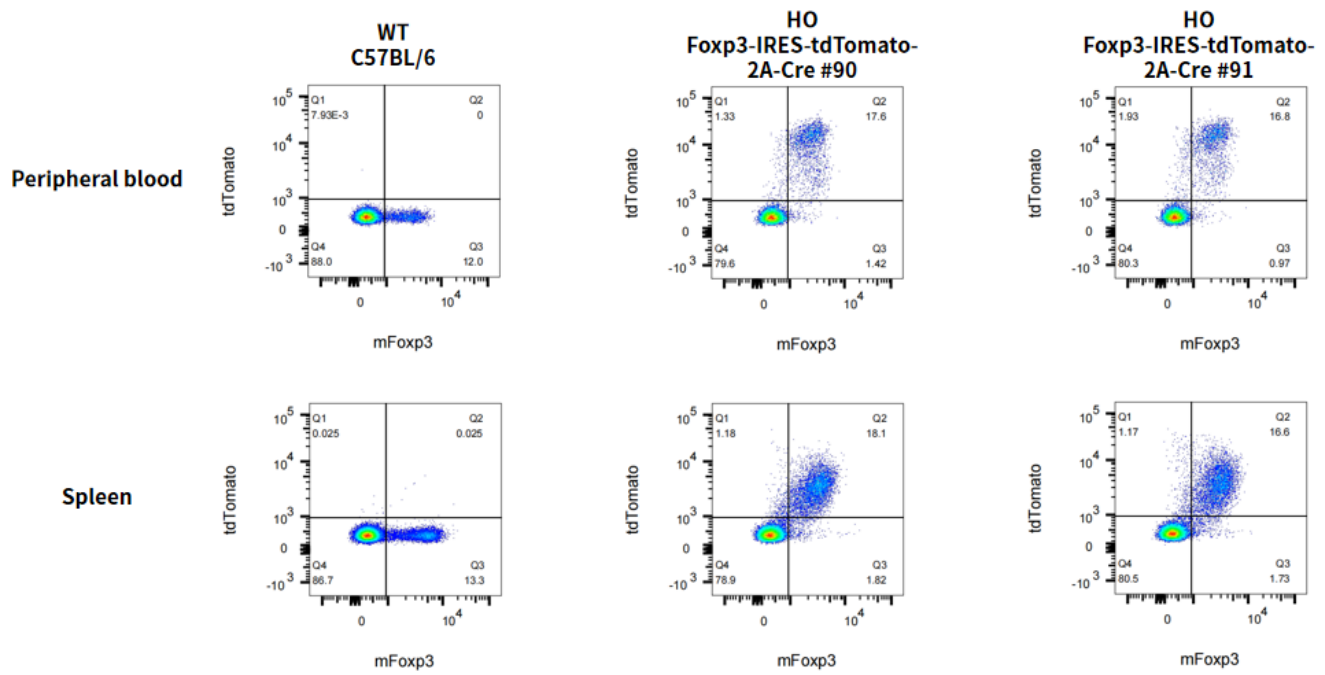


Fig1. Detection of tdTomato expression in C57BL/6 and HO Foxp3-IRES-tdTomato-2A-Cre mice.

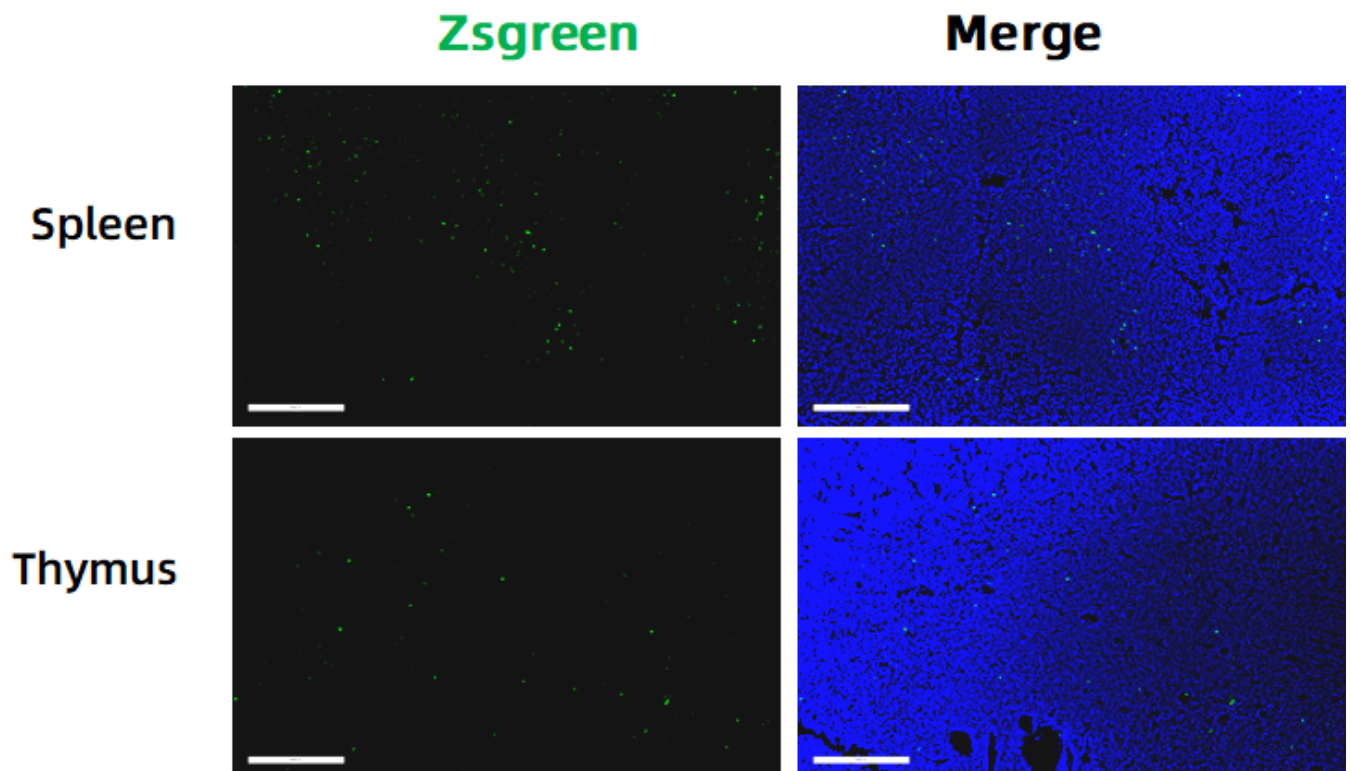


Fig2. Cre-mediated recombination in the spleen and thymus of Foxp3^{Cre/+}; Rosa26^{ZsGreen/+} mouse. ZsGreen(green) expression can be detected in the spleen and thymus of Foxp3^{Cre/+}; Rosa26^{ZsGreen/+} mouse, while tdTomato(red) expression can not be detected.

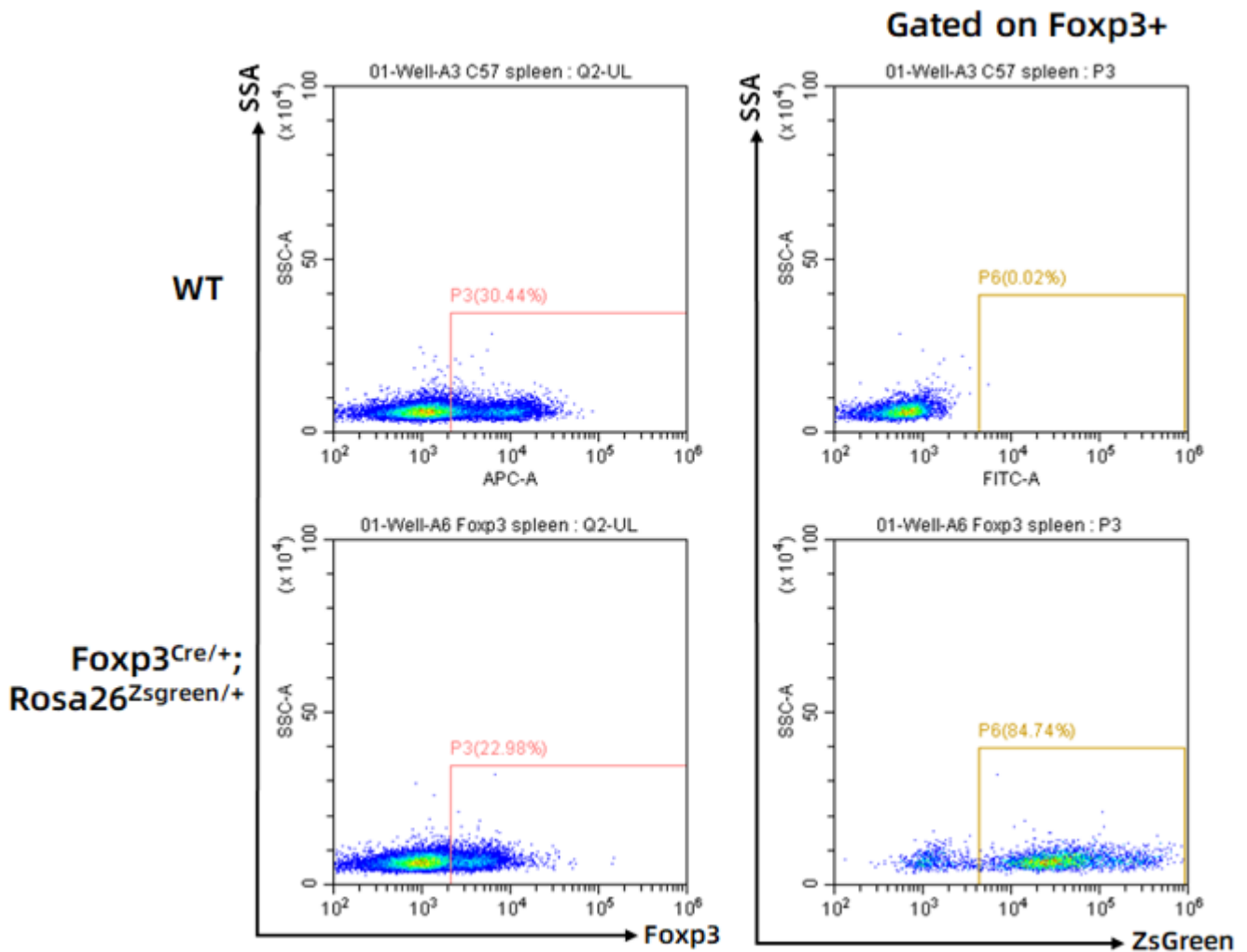


Fig3. Flow cytometry analysis of zsGreen expression in the Foxp3⁺ cell derived from the thymus of mice. ZsGreen⁺ cells accounted for 37.56% of Foxp3⁺ cells in the thymus of Foxp3^{Cre/+}; Rosa26^{ZsGreen/+} mouse.

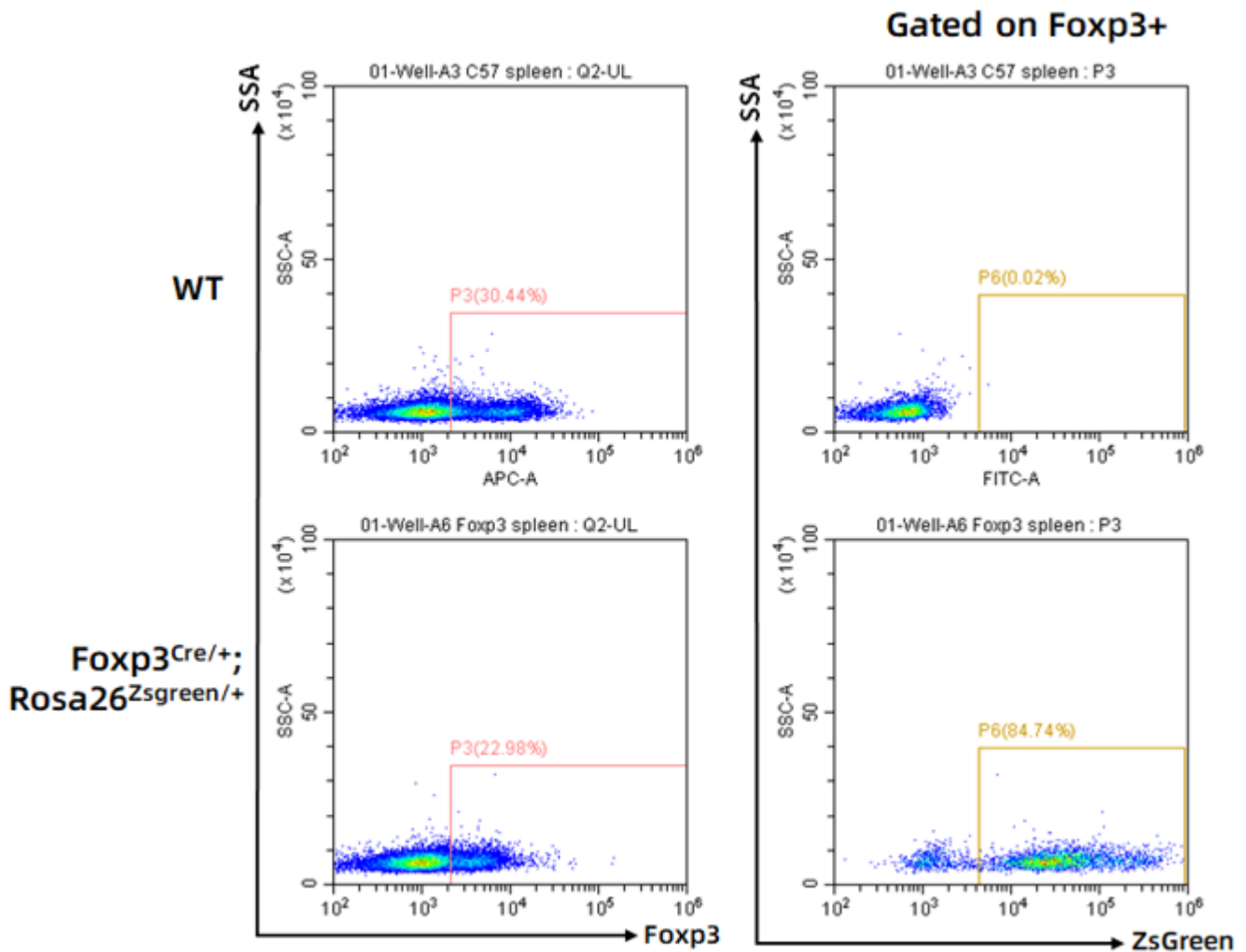


Fig4. Flow cytometry analysis of zsGreen expression in the Foxp3^+ cell derived from the spleen of mice. ZsGreen^+ cells accounted for 84.74% of Foxp3^+ cells in the spleen of $\text{Foxp3}^{\text{Cre}/+}; \text{Rosa26}^{\text{ZsGreen}/+}$ mouse.

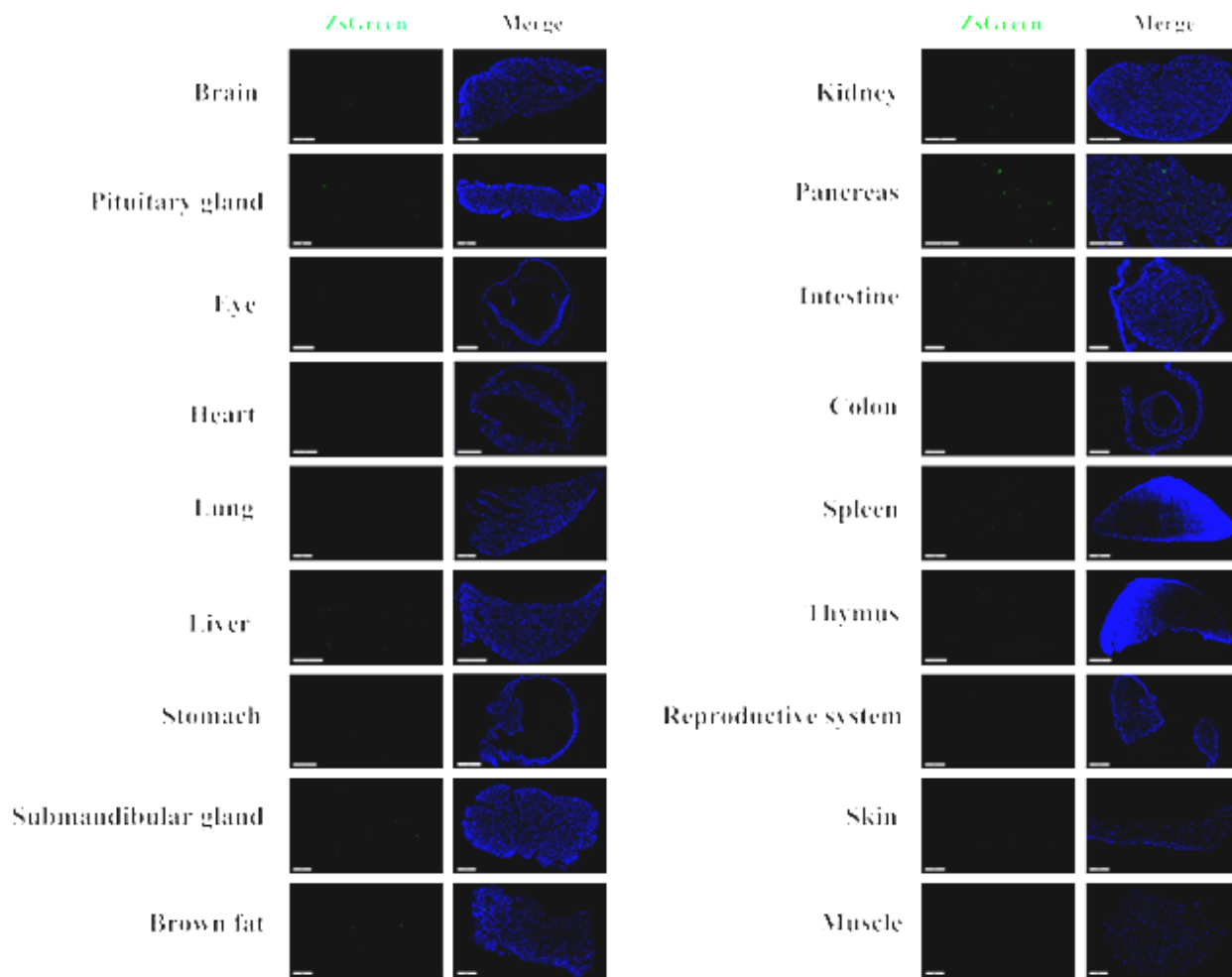


Fig5. ZsGreen was also expressed in the mesenteric lymph nodes, pancreas and liver. There was a small amount of expression in the brain, pituitary gland, retina, lung, stomach, kidney, submandibular gland, brown fat, ovary and skin, and no expression in the heart, colon and muscle. (For more information please contact: 400-728-0660.)