

Anti-Mouse Foxp3 FITC

Catalog Number :83412-50

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: 3G3

Format/Conjugate: FITC

Concentration: 0.5 mg/mL

Reactivity: Mouse

Laser: Blue (488nm)

Peak Emission: 520nm

Peak Excitation: 494nm

Filter: 530/30

Brightness (1=dim,5=brightest): 3

Isotype: Mouse IgG1, kappa

Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC

Description

The 3G3 monoclonal antibody specifically reacts with the mouse 50-55 kDa Foxp3 protein (JM2, IPEX), a member of the forkhead family of transcription factors. Foxp3 is expressed by the Treg lymphocytes, whose development and function are influenced by the forkhead protein. Ectopic expression of Foxp3 in T lymphocytes inhibits their activity and cytokine expression.

Mutations of Foxp3 result in the "scurfy" mice phenotype.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.015 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Nagar, M., Vernitsky, H., Cohen, Y., Dominissini, D., Berkun, Y., Rechavi, G., ... Goldstein, I. (2008). Epigenetic inheritance of DNA methylation limits activation-induced expression of FOXP3 in conventional human CD25⁺ CD4⁺ T cells.; *International immunology*; 20(8), 1041-1055.
2. Bolzer, K., Käser, T., Saalmüller, A., Hammer, S. E. (2009). Molecular characterisation of porcine Forkhead-box p3 (< i> Foxp3</i>); *Veterinary immunology and immunopathology*; 132(2), 275-281.
3. Gavin, M. A., Torgerson, T. R., Houston, E., Ho, W. Y., Stray-Pedersen, A., Ocheltree, E. L., ... Rudensky, A. Y. (2006). Single-cell analysis of normal and FOXP3-mutant human T cells: FOXP3 expression without regulatory T cell development.; *Proceedings of the National Academy of Sciences*; 103(17), 6659-6664.