TECHNICAL DATA SHEET

PE Anti-Mouse Foxp3 (3G3)

Catalog Number: 50-5773

PRODUCT INFORMATION

Contents: PE Anti-Mouse Foxp3 (3G3)

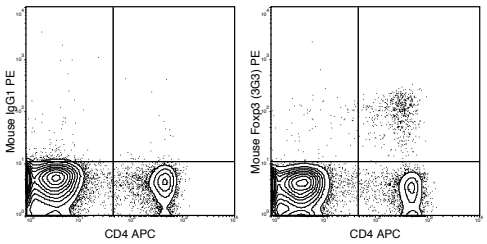
Isotype: Mouse IgG1, kappa

Concentration: 0.2 mg/mL

Clone: 3G3

Reactivity: Mouse

Formulation: 10 mM NaH_2PO_4, 150 mM NaCl, 0.05% BSA, 0.05% NaN_3, pH7.2



C57Bl/6 splenocytes were stained with APC Anti-Mouse CD4 (20-0041), followed by intracellular staining with 0.125 ug PE Anti-Mouse Foxp3 (50-5773) (right panel) or PE 0.125 ug Mouse IgG1 isotype control (left panel).

DESCRIPTION

The 3G3 antibody reacts with mouse Foxp3, a 50-55 kDa transcription factor which is a central regulator of T cell activity and is critical for the development and function of regulatory T cells (Tregs). Foxp3 is expressed at constitutively high levels in Treg cells, which are further identified as being CD4+ CD25+. In resting conventional T cells (CD4+ CD25-) Foxp3 expression is restricted, and upon TCR activation is expressed only transiently and in a small proportion of cells. However, the growth factor TGF-beta has been shown to induce expression of Foxp3 in naïve T cells, driving their development into Foxp3+ Tregs, which are called “induced” or “adaptive” Tregs. These cells are phenotypically similar to so-called “natural” Tregs (CD4+ CD25high Foxp3+) which originate in the thymus and comprise the majority of Treg cells. Tregs are critical for maintaining peripheral tolerance and are implicated in the development of autoimmunity. The 3G3 antibody may be used for intracellular detection of Foxp3 in cells from mouse and Rhesus macaque.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

REFERENCES

Ramos RN, Oliveira CE, Gasparoto TH, et al. 2012. Carcinogenesis. 33: 902-909. (flow cytometry) Klein M, Vaeth M, Scheel T, Grabbe S, Baumgrass R, Berberich-Siebelt F, Bopp T, Schmitt E, and Becker C. 2012. J. Immunol. 188: 1091-1097. (flow cytometry)Ansari AA, Reimann KA, Mayne AE, Takahashi Y, Stephenson ST, Wang R, Wang X, Li J, Price AA, Little DM, Zaidi M, Lyles R, and Villinger F. 2011. J. Immunol. 186: 1044-1059. (flow cytometry – Rhesus macaque)Nagar M, Vernitsky H, Cohen Y, Dominissini D, Berkun Y, Rechavi G, Amariglio N, and Goldstein I. 2008. Int. Immunol. 20: 1041-1055. (flow cytometry)Hombach AA, Kofler D, Hombach A, Rappl G, and Abken H. 2007. J. Immunol. 179: 7924-7931. (flow cytometry).Gavin MA, Torgerson TR, Houston E, deRoos P, Ho WY, Stray-Pedersen A, Ocheltree EL, Greenberg PD, Ochs HD, and Rudensky AY. (flow cytometry)