TECHNICAL DATA SHEET

APC Anti-Mouse CD357 (GITR) (DTA-1)

Catalog Number: 20-5874

PRODUCT INFORMATION

Contents: APC Anti-Mouse CD357 (GITR) (DTA-1)

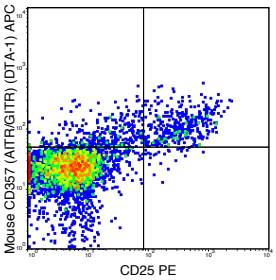
Isotype: Rat IgG2b

Concentration: 0.2 mg/mL

Clone: DTA-1

Reactivity: Mouse

Formulation: 10 mM NaH2PO4, 150 mM NaCl, 0.05% BSA, 0.05% NaN3, pH7.2



C57Bl/6 splenocytes were stained with FITC Anti-Mouse CD4 (35-0041), PE Anti-Mouse CD25 (50-0251) and 0.06 ug APC Anti-Mouse CD357 (GITR) (20-5874). Cells in the CD4+ lymphocyte gate are shown.

DESCRIPTION

The DTA-1 antibody reacts with mouse CD357, also known as GITR or AITR (in humans), a 66-70 kDa member of the Tumor Necrosis Factor superfamily (TNFRSF18). GITR is primarily found on T cells, and its function may vary depending on the T cell type where it is expressed. GITR is upregulated on activated T cells where it provides co-stimulation, yet GITR may promote the inhibition of CD4+ CD25+ Treg cells, where it is expressed at high levels. GITR ligand (GITRL) is found on B cells, macrophages, dendritic and endothelial cells, and is implicated in regulating both innate and adaptive immune responses.The DTA-1 antibody may be used for analysis of GITR expression on T cells, and is also commonly used in vitro as an agonistic antibody to induce GITR signaling in various assays.

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

Lee L-F, Logronio K, Tu GH, Zhai W, Ni I, Mei L, Dilley J, Yu J, et al. 2012. Proc. Natl. Acad. Sci. 10.1073. (flow cytometry).. Joetham A, Ohnishi H, Okamoto M, Takeda K, Schedel M, Domenico J, Dakhama A, and Gelfand EW. 2012. J. Biol. Chem. 287: 17100-17108. (in vitro activation). Van der Werf N, Redpath SA, Phythian-Adams AT, Azuma M, Allen JE, Maizels RM, Macdonald AS, and Taylor MD. 2011. J. Immunol. 187: 1411-1420. (in vivo activation). Molloy MJ, Zhang W, and Usherwood EJ. 2011. J. Immunol. 186: 6218-6226. (in vivo activation) II. Yokoyama T, Matsuda S, Takae Y, Wada N, Nishikawa T, Amagai M, and Koyasu S. 2011. Int. Immunol. 23: 365-373. (Treg depletion – magnetic beads).