SONY

Product Data Sheet

PerCP/Cyanine5.5 anti-mouse CD357 (GITR)

Catalog # / Size: 1231580 / 100 µg
1231575 / 25 µg

Clone: DTA-1

Isotype: Rat IgG2b, λ

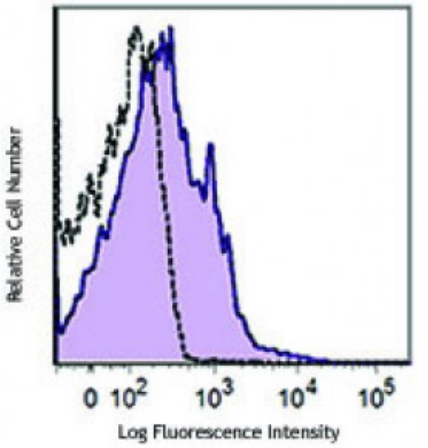
Immunogen: Mouse CD25+ CD4+ T cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cyanine5.5 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2



C57BL/6 mouse splenocytes were stained with CD357 (clone DTA-1) PerCP/Cy5.5 (filled histogram) or rat IgG2b PerCP/Cy5.5 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

Application References:

1. Tone M, *et al.* 2003. *Proc. Natl. Acad. Sci. USA* 100:15059.
2. Shimizu J, *et al.* 2002 *Nat. Immunol.* 3:135.
3. Stephens GL, *et al.* 2004. *J. Immunol.* 173:5008.
4. McHugh RS, *et al.* 2002. *Immunity* 16:311.

Description: GITR (glucocorticoid-induced TNFR-related gene) is a member of the TNF receptor superfamily, also known as TNFRSF18 and AITR (in humans). It is expressed at low levels on resting T lymphocytes and at high levels on $CD25^+$ $CD4^+$ Tregs. The expression of GITR on T cells can be upregulated upon activation. Interaction of GITR with its ligand (GITRL) has been demonstrated to augment T cell activation, proliferation, cytokine production as well as MAPKs and NF-κB activation, and abrogate the inhibitory function of $CD25^+$ $CD4^+$ Tregs. *In vivo* activation of GITR causes development of autoimmune diseases and restores the suppressed immune response.

Antigen References:

1. Tone M, *et al.* 2003. *Proc. Natl. Acad. Sci. USA* 100:15059.
2. Shimizu J, *et al.* 2002 *Nat. Immunol.* 3:135.
3. Stephens GL, *et al.* 2004. *J. Immunol.* 173:5008.
4. McHugh RS, *et al.* 2002. *Immunity* 16:311.

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com