



CD357 Antibody [DTA-1] (PE)

CATALOG NUMBER: 76-987

Specifications

SPECIES REACTIVITY:	Mouse
TESTED APPLICATIONS:	FACS
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
SPECIFICITY:	The DTA-1 monoclonal antibody specifically reacts with mouse Glucocorticoid-Induced TNFR-related protein, also known as GITR and TNFRSF18, a 66-70 kDa homodimer glycoprotein, detected in the T cells treated with glucocorticoid dexamethasone.
HOST SPECIES:	Rat

Properties

PURIFICATION:	The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.
PHYSICAL STATE:	liquid
BUFFER:	Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.
CONCENTRATION:	0.2 mg/mL
STORAGE CONDITIONS:	The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.
CLONALITY:	Monoclonal
ISOTYPE:	Rat IgG2b
CONJUGATE:	PE

Additional Info

ALTERNATE NAMES:	AITR, Gitr, Tnfrsf18
OFFICIAL SYMBOL:	Tnfrsf18
GENE ID:	21936

Background

BACKGROUND:	The DTA-1 monoclonal antibody specifically reacts with mouse Glucocorticoid-Induced TNFR-related protein, also known as GITR and TNFRSF18, a 66-70 kDa homodimer glycoprotein, detected in the T cells treated with glucocorticoid dexamethasone. GITR is also expressed in naïve mice by CD25+/CD4+/CD8a- thymocytes and on CD25+/CD4+/CD45RB-low splenocytes. Low levels were detected in splenic CD25+/CD4+/CD45RB-low T cells, B cells, dendritic cells and macrophages. A GITR ligand was detected on dendritic cells, macrophages and B cells. The DTA-1 antibody stimulates GITR and abrogates suppression by T regulatory cells (Treg), without affecting their proliferation. DTA-1 administration or the removal of GITR-expressing cells led to organ specific autoimmune disease.
REFERENCES:	1) Ko, K., Yamazaki, S., Nakamura, K., Nishioka, T., Hirota, K., Yamaguchi, T., ... Sakaguchi, S. (2005). Treatment of advanced tumors with agonistic anti-GITR mAb and its effects on tumor-infiltrating Foxp3+ CD25+ CD4+ regulatory T cells. The Journal of experimental medicine, 202(7), 885-891. 2) Shimizu, J., Yamazaki, S., Takahashi, T., Ishida, Y., Sakaguchi, S. (2002). Stimulation of CD25+ CD4+

regulatory T cells through GITR breaks immunological self-tolerance. *Nature immunology*, 3(2), 135-142.

3) Tone, M., Tone, Y., Adams, E., Yates, S. F., Frewin, M. R., Cobbold, S. P., Waldmann, H. (2003). Mouse glucocorticoid-induced tumor necrosis factor receptor ligand is costimulatory for T cells. *Proceedings of the National Academy of Sciences*, 100(25), 15059-15064.

FOR RESEARCH USE ONLY

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