



CD357 Antibody [DTA-1] (APC)

CATALOG NUMBER: 76-989

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:	APC

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) Kataoka, H., Takakura, N., Nishikawa, S., Tsuchida, K., Kodama, H., Kunisada, T., ... Nishikawa, S. I. (1997). Expressions of PDGF receptor alpha, c Kit and Flk1 genes clustering in mouse chromosome 5 define distinct subsets of nascent mesodermal cells. <i>Development</i> , 123(6), 729-740. 2) Ishitobi, H., Matsumoto, K., Azami, T., Itoh, F., Itoh, S., Takahashi, S., Ema, M. (2010). Flk1-GFP BAC Tg

mice: an animal model for the study of blood vessel development. *Experimental animals*, 59(5), 615-622.

3) Yamashita, J., Itoh, H., Hirashima, M., Ogawa, M., Nishikawa, S., Yurugi, T., ... Nishikawa, S. I. (2000). Flk1-positive cells derived from embryonic stem cells serve as vascular progenitors. *Nature*, 408(6808), 92-96.

FOR RESEARCH USE ONLY

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