

Product datasheet for **TA386233**

Tnfrsf18 Rat Monoclonal Antibody [Clone ID: DTA-1]

Product data:

Product Type: Primary Antibodies

Clone Name: DTA-1

Applications: FC, IP, WB

Reactivity: Mouse

Host: Rat

Isotype: IgG2a, lambda

Clonality: Monoclonal

Immunogen: This antibody was raised by immunising Wistar rats with the CD25+CD4+ T cell line. Hybridoma cells were generated by fusing spleen cells from the immunized rat with P3X63Ag8.653 myeloma cells, assessed for secreting antibodies capable of neutralizing in vitro CD25+CD4+ T cell-mediated suppression of anti-CD3-stimulated T cell proliferation, and then cloned. This DTA-1 clone secreted a monoclonal rat immunoglobulin G2a (IgG2a) that showed high neutralizing activity.

Specificity: This antibody is specific for murine GITR, a member of the tumor necrosis factor receptor (TNFR) family that is expressed at low levels on unstimulated T cells, B cells, and macrophages. Upon activation, CD4+ and CD8+ T cells up-regulate GITR expression, whereas immunoregulatory T cells constitutively express high levels of GITR.

This antibody has been used in various FACS analyses for diverse immuno-oncological applications, such as to delineate how membrane-organizing protein moesin controls Treg differentiation and antitumor immunity via TGF- β signaling (Ansa-Addo et al, 2017), to suggest the therapeutic potential of TGF- β -induced Tregs (iTregs) in treating autoimmune gastritis (Nguyen et al, 2014), and to demonstrate that costimulation with the ligand of GITR elicits dose-dependent enrichment for cells of lower TCR affinity in the Treg cell repertoire (Mahmud et al, 2014). This antibody has also been used in Western Blots to elucidate the mechanism of human T-cell leukemia virus type 1 (HTLV-1) in the development of neoplastic and inflammatory diseases (Satou et al, 2011), and in immunoprecipitation analysis to aid the investigation of the role of GITR in dominant immunological self-tolerance maintained by CD25+CD4+ regulatory T cells (Shimizu et al, 2002). In addition, the anti-tumour effects of this agonistic anti-GITR antibody have been demonstrated in various murine models (Scirka et al, 2017; Coe et al, 2010; Cohen et al. 2010; Hu et al, 2008; Ko et al, 2005).



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Formulation:	PBS with 0.02% Proclin 300.
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid freeze and thaw cycles.
Stability:	3 years from dispatch.
Gene Name:	tumor necrosis factor receptor superfamily, member 18
Database Link:	Entrez Gene 21936 Mouse O35714
Synonyms:	AITR; GITR; GITR-D
Note:	This reformatted antibody was made using the variable domain sequences of the original rat IgG2b format, for improved compatibility with existing reagents, assays and techniques.