



Rat Anti-Mouse GITR Monoclonal antibody, clone DTA-1 (CABT-L4383)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

The DTA-1 monoclonal antibody reacts with mouse GITR (glucocorticoid-induced TNFR-related gene), a 66-70 kDa co-stimulatory immune checkpoint molecule belonging to the Tumor Necrosis Factor superfamily (TNFRSF18). GITR is expressed at low levels on resting T lymphocytes and at high levels on regulatory T cells. GITR is upregulated on activated T cells where it provides co-stimulation. GITR ligand (GITRL) is found on B cells, macrophages, dendritic and endothelial cells, and is implicated in regulating both innate and adaptive immune responses. GITR is also thought to play a key role in dominant immunological self-tolerance maintained by regulatory T cells. Knockout studies in mice also suggest the role of this receptor is in the regulation of CD3-driven T cell activation and programmed cell death. The DTA-1 antibody is an agonistic antibody that is commonly used to induce GITR signaling in vivo.

Target	Mouse GITR
Immunogen	Mouse CD25+ CD4+ T cells
Isotype	IgG2b, λ
Source/Host	Rat
Species Reactivity	Mouse
Clone	DTA-1
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo GITR stimulation

Molecular Weight	150 kDa
Format	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	Receptor for TNFSF18. Seems to be involved in interactions between activated T-lymphocytes and endothelial cells and in the regulation of T-cell receptor-mediated cell death. Mediated NF-kappa-B activation via the TRAF2/NIK pathway.
Keywords	TNFRSF18;tumor necrosis factor receptor superfamily, member 18;tumor necrosis factor receptor superfamily member 18;AITR;CD357;GITR;activation-inducible TNFR family receptor;glucocorticoid-induced TNFR-related protein;TNF receptor superfamily activation-inducible protein;GITR-D;

GENE INFORMATION

Official Symbol	tumor necrosis factor receptor superfamily, member 18
Synonyms	TNFRSF18; tumor necrosis factor receptor superfamily, member 18; tumor necrosis factor receptor superfamily member 18; AITR; CD357; GITR; activation-inducible TNFR family receptor; glucocorticoid-induced TNFR-related protein; TNF receptor superfamily activation-inducible protein; GITR-D;
References	Vashist, N., et al. (2018). "Influenza-Activated ILC1s Contribute to Antiviral Immunity Partially Influenced by Differential GITR Expression." Front Immunol 9: 505. PubMed;