

# CD357 / GITR Monoclonal Rat Antibody (DTA-1)

## Product Description

GITR (glucocorticoid-induced TNFR-related gene) is a member of the TNF-receptor superfamily, also known as TNFRSF18. 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-B 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.

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Clin Cancer Res (2013) 19(5): 1044-53. (functional studies)
2. J Immunol (2019) 203:864-872. (Flow)

### Product attributes

Antibody number	#0976
Antibody reactivity (target)	GITR, Tnfrsf18
Antibody type	Primary
Host species	Rat
Clonality	Monoclonal
Clone	DTA-1
Isotype	IgG2b, kappa
Molecular weight	66-70 kDa (Homodimer)
Synonyms	Activation-inducible TNF-related ligand; AITRL; GITRL; Glucocorticoid induced TNFR related protein ligand; Glucocorticoid-induced TNF-related ligand; hGITRL; TL6; TNFSF18; Tumor necrosis factor (ligand) superfamily member 18
Human gene symbol	TNFRSF18
Entrez gene ID	21936
SwissProt	O35714
Unigene	3180
Immunogen	Mouse CD25+ CD4+ T cells
Antibody target cellular localization	Plasma membrane
Expected antibody applications	Flow, surface (published for clone), Functional studies (published for clone)
Species reactivity	Mouse
Antibody application notes	Flow cytometry: 0.5-1 ug/million cells in 0.1 mL. Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user
Positive control	CD25+CD4+ Tregs.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Cell/tissue expression	T-cells
Antibody research areas	Immunology, Inflammation