

# 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- $\kappa$ 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. **Catalog number key for antibody number 0976, Anti-GITR|Tnfrsf18 (DTA-1)**

## 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  |
| Product origin                        | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.  |
| Antibody research areas               | Immunology, Inflammation   |

| Antibody # prefix | Conjugation        | Ex/Em (nm) | Laser line | Detection channel        | Dye Features                     |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04             | CF@405S            | 404/431    | 405        | DAPI (microscopy), AF405 | <a href="#">CF@405S Features</a> |
| BNC88             | CF@488A            | 490/515    | 488        | GFP, FITC                | <a href="#">CF@488A Features</a> |
| BNC68             | CF@568             | 562/583    | 532, 561   | RFP, TRITC               | <a href="#">CF@568 Features</a>  |
| BNC94             | CF@594             | 593/614    | 561        | Texas Red®               | <a href="#">CF@594 Features</a>  |
| BNC40             | CF@640R            | 642/662    | 633-640    | Cy@5                     | <a href="#">CF@640R Features</a> |
| BNC47             | CF@647             | 650/665    | 633-640    | Cy@5                     | <a href="#">CF@647 Features</a>  |
| BNC74             | CF@740             | 742/767    | 633-685    | 775/50                   | <a href="#">CF@740 Features</a>  |
| BNCB              | Biotin             | N/A        | N/A        | N/A                      |                                  |
| BNUB              | Purified           | N/A        | N/A        | N/A                      |                                  |
| BNUM              | Purified, BSA-free | N/A        | N/A        | N/A                      |                                  |

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## 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)