

# Technical Data Sheet

## RecombiMAb anti-mouse GITR (LALA-PG)



**Attention:** Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

### Lot Specific Information

**Lot Number:** Lot Specific\*  
**Volume:** Lot Specific\*  
**Concentration:** Lot Specific\* (generally 4 to 11 mg/ml) \*  
**Total Protein:** Lot Specific\*

\*This information will be noted on the certificate of analysis that ships with this product.

### Product Information

**Catalog Number:** CP031  
**Clone:** DTA-1-CP031  
**Isotype:** Mouse IgG2b,  $\kappa$   
**Recommended Isotype Control(s):** RecombiMAb mouse IgG2b (LALA-PG) isotype control, anti-hen egg lysozyme  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Mutations:** LALA-PG  
**Immunogen:** Mouse CD25+ CD4+ T cells  
**Reported Applications:** *in vivo* GITR stimulation\*  
\*Reported for the original rat IgG2b DTA-1 antibody  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:** <1EU/mg (<0.001EU/ $\mu$ g)  
Determined by LAL gel clotting assay  
**Purity:** >95%  
Determined by SDS-PAGE  
**Sterility:** 0.2  $\mu$ m filtration  
**Production:** Purified from HEK293 cell supernatant in an animal-free facility  
**Purification:** Protein G  
**Aggregation:** <5%  
Determined by SEC  
**RRID:**  
**Molecular Weight:** 150 kDa

### Murine Pathogen Test Results

Mouse Norovirus: Negative, Mouse Parvovirus: Negative, Mouse Minute Virus: Negative, Mouse Hepatitis Virus: Negative, Reovirus Screen: Negative, Lymphocytic Choriomeningitis virus: Negative, Lactate Dehydrogenase-Elevating Virus: Negative, Mouse Rotavirus: Negative, Theiler's Murine Encephalomyelitis: Negative, Ectromelia/Mousepox Virus: Negative, Hantavirus: Negative, Polyoma Virus: Negative, Mouse Adenovirus: Negative, Sendai Virus: Negative, Mycoplasma Pulmonis: Negative, Pneumonia Virus of Mice: Negative, Mouse Cytomegalovirus: Negative, K Virus: Negative

### Description

The DTA-1-CP031 monoclonal antibody is a chimeric version of the original DTA-1 antibody. The variable domain sequences are identical to the original DTA-1 but the constant region sequences have been switched from rat IgG2b to mouse IgG2b. The DTA-1-CP031 antibody also contains a LALA-PG mutation in the Fc fragment rendering it unable to bind to endogenous Fc $\gamma$  receptors. The DTA-1-CP031 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.

## Storage

Store at the stock concentration at 4°C. **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

## Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

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