Technical Data Sheet

RecombiMAb anti-mouse GITR

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:	**CP028**
Clone:	**DTA-1-CP028**
Isotype:	Mouse IgG2a, κ
Recommended Isotype Control(s):	RecombiMAb mouse IgG2a isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Mouse CD25+ CD4+ T cells
Reported Applications:	Flow cytometry; Western Blot; Immunoprecipitation*; *in vitro* T cell stimulation, proliferation and signaling; *in vivo* GITR stimulation; *in vivo* antitumor immunity *Reported for the original rat IgG2b DTA-1 antibody. For information on *in vivo* applications, please contact technicalservice@bioxcell.com
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	<1EU/mg (<0.001EU/μg) Determined by LAL gel clotting assay
Purity:	>95% Determined by SDS-PAGE
Sterility:	0.2 μm 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 recombinant DTA-1-CP028 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, lambda to mouse IgG2a, kappa. Published studies have shown engagement of murine Fc γ receptors (FcγRs) is critical for the antitumor effects of antibodies targeting GITR, including DTA-1. Published studies have also demonstrated the

original rat DTA-1 antibody can result in anaphylaxis in mice upon repeated intraperitoneal dosing due to the generation of an anti-idiotypic anti-drug Ab immune response. Chimerization of DTA-1 with a murine constant region results in reduced development and severity of anaphylaxis in mice but does not affect T cell agonistic properties or in vivo antitumor efficacy. The DTA-1-CP028 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 is thought to play a key role in dominant immunological self-tolerance maintained by regulatory T cells. Knockout studies in mice 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.

Application References

For a complete list of references, visit https://bioxcell.com/cp028?bxcs=9k1b3a#tab_references or scan the QR code below.

Bio X Cell, LLC
https://bioxcell.com
+1-866-787-3444
customerservice@bioxcell.com