

Technical Data Sheet

RecombiMAb anti-mouse/human/rat/ monkey/hamster/canine/bovine TGF- β (LALA-PG)



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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 Website Link: <https://bioxcell.com/recombimab-anti-mouse-human-rat-monkey-hamster-canine-bovine-tgf-beta-lala-pg-cp210>

Product Information

Catalog Number: CP210
Clone: 1D11.16.8-CP210
Recommended Isotype Control(s): RecombiMAb mouse IgG2a (LALA-PG) isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Mutations: LALA-PG
Immunogen: Bovine TGF β isoform 2
Reported Applications: ELISA
Western Blot
in vivo TGF β neutralization*
in vitro TGF β neutralization*
*Reported for the original 1D11.16.8 clone
Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: ≤ 0.5 EU/mg (≤ 0.0005 EU/ μ g)
Determined by LAL assay
Purity: $\geq 95\%$
Determined by SDS-PAGE
Sterility: 0.2 μ m filtration
Production: Purified from mammalian cell supernatant in an animal-free facility
Purification: Protein A
Aggregation: $< 5\%$
Determined by SEC
RRID: [AB_3751692](https://rrid.info/AB_3751692)
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 1D11.16.8-CP210 monoclonal antibody is a recombinant version of the original 1D11.16.8 clone. The variable domain

sequences are identical but the constant region sequences have been switched from Mouse IgG1, κ to mouse IgG2a, κ for use in murine models. Additionally, the constant region includes the Fc silencing mutation variant LALA-PG, rendering it unable to bind endogenous murine Fc γ receptors or C1q to induce antibody-dependent cell-mediated cytotoxicity (ADCC) or complement-dependent cytotoxicity (CDC). This allows for pure cytokine neutralization without any Fc γ R or complement mediated effector functions so that the biological readout reflects TGF β neutralization rather than immune cell depletion or Fc-dependent inflammation. Fc-silent antibodies can also improve in-vitro assays by reducing non-specific signaling and background. The LALA-PG variant has demonstrated significantly reduced effector function, C1q binding and C3 fixation compared to other common silencing mutations while retaining favorable biophysical and manufacturing properties and preserving FcRn-mediated half-life. The highly controlled sequence and lack of genetic drift in recombinant antibodies provide more reliable and reproducible results over hybridoma derived antibodies. The 1D11.16.8-CP210 monoclonal antibody reacts with mouse, human, rat, monkey, hamster, canine and bovine TGF- β (transforming growth factor beta) isoforms 1, 2 and 3. TGF- β is a multifunctional cytokine that regulates the proliferation of epithelial cells, endothelial cells, fibroblasts, neurons, lymphoid cells including T lymphocytes and NK cells, and other hematopoietic cell types. TGF- β also regulates the activities of activated macrophages and the development of regulatory T cells. Additionally, TGF- β plays roles in immune function, tissue remodeling and wound repair. TGF- β exists as five highly similar isoforms (TGF- β 1-5) with homologies of 70-80%. TGF- β 1 is synthesized by the enzymatic cleavage of a long precursor TGF- β 1 polypeptide encoded by the TGFB1 gene which yields the mature protein and the Latency Associated Peptide (LAP). The LAP and mature TGF- β 1 non-covalently associate during secretion. TGF- β is ubiquitously expressed by many cell types including macrophages and platelets which express high levels of TGF- β . TGF- β signaling has been shown to play roles in cancer, autoimmune diseases, asthma, heart disease, and diabetes.

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/recombimab-anti-mouse-human-rat-monkey-hamster-canine-bovine-tgf-beta-lala-pg-cp210?utm_source=cr9k1b#tab_references or scan the QR code below.



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