

# Technical Data Sheet

## RecombiMAb anti-mouse/human/rat/monkey/ hamster/canine/bovine TGF- $\beta$ (D265A)



[bioxcell.com](https://bioxcell.com)

**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-d265a-cp221>

### Product Information

Catalog Number: CP221  
Clone: 1D11.16.8-CP221  
Isotype: Mouse IgG1 (D265A)  
Recommended Isotype Control(s): RecombiMAb mouse IgG1 (D265A) isotype control, anti-hen egg lysozyme  
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer  
Mutations: D265A  
Immunogen: Bovine TGF $\beta$  isoform 2  
Reported Applications: Western Blot  
*in vivo* TGF $\beta$  neutralization\*  
*in vitro* TGF $\beta$  neutralization\*  
\*Reported for the original 1D11.16.8 clone  
Formulation: PBS, pH 7.0  
Contains no stabilizers or preservatives  
Endotoxin:  $\leq 0.5$  EU/mg ( $\leq 0.0005$  EU/ $\mu$ g)  
Determined by LAL assay  
Purity:  $\geq 95\%$   
Determined by SDS-PAGE  
Sterility: 0.2  $\mu$ m filtration  
Production: Purified from mammalian cell supernatant in an animal-free facility  
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 1D11.16.8-CP221 monoclonal antibody is a recombinant version of the original 1D11.16.8 clone. 1D11.16.8-CP221 includes the D265A mutation in the Fc region to reduce binding to endogenous murine Fc $\gamma$  receptors preventing antibody-

dependent cell-mediated cytotoxicity (ADCC) while preserving FcRn-mediated half-life. Fc-silent anti-TGF- $\beta$  antibodies allow for TGF- $\beta$  blockade and neutralization without ADCC-mediated cell depletion. 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-CP221 monoclonal antibody reacts with mouse, human, rat, monkey, hamster, canine and bovine TGF- $\beta$  (transforming growth factor beta) isoforms 1, 2 and 3. TGF- $\beta$  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- $\beta$  also regulates the activities of activated macrophages and the development of regulatory T cells. Additionally, TGF- $\beta$  plays roles in immune function, tissue remodeling and wound repair. TGF- $\beta$  exists as five highly similar isoforms (TGF- $\beta$  1-5) with homologies of 70-80%. TGF- $\beta$ 1 is synthesized by the enzymatic cleavage of a long precursor TGF- $\beta$ 1 polypeptide encoded by the TGFB1 gene which yields the mature protein and the Latency Associated Peptide (LAP). The LAP and mature TGF- $\beta$ 1 non-covalently associate during secretion. TGF- $\beta$  is ubiquitously expressed by many cell types including macrophages and platelets which express high levels of TGF- $\beta$ . TGF- $\beta$  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-d265a-cp221?utm\\_source=cr9k1b#tab\\_references](https://bioxcell.com/recombimab-anti-mouse-human-rat-monkey-hamster-canine-bovine-tgf-beta-d265a-cp221?utm_source=cr9k1b#tab_references) or scan the QR code below.



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