

Technical Data Sheet



RecombiMAb anti-mouse TREM-2 (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: CP067
Clone: 178-CP067
Isotype: Mouse IgG2a, κ
Recommended Isotype Control(s): RecombiMAb mouse IgG2a (LALA-PG) isotype control, unknown specificity
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Immunogen: Recombinant protein containing the ectodomain of TREM-2 fused to the constant domain of human Ig
Reported Applications: in vivo TREM-2 blockade*
in vitro TREM-2 blockade*
Flow cytometry*
*Reported for the original rat IgG2a 178 antibody. For information on *in vivo* applications, please contact (technicalservice@bioxcell.com)
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 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 178-CP067 monoclonal antibody is a chimeric version of the original 178 antibody. The variable domain sequences are identical to the original 178-CP067 but the constant region sequences have been switched from rat IgG2a to mouse IgG2a. The 178-CP067 antibody also contains a LALA-PG mutation in the Fc fragment rendering it unable to bind to endogenous Fc γ receptors. The 178-CP067 monoclonal antibody reacts with mouse TREM-2 (the triggering receptor expressed on

myeloid cell 2), a single-pass transmembrane protein also known as PLOS2. This anti-mouse TREM-2 antibody does not cross-react with TREM-1. TREM-2 is primarily expressed by myeloid cells, infiltrating macrophages, and tissue-specific macrophages, including microglia. TREM-2 acts as a receptor for abeta 42 (a cleavage product of the amyloid beta precursor protein) and mediates its uptake and degradation in microglia. TREM-2 also binds to lipoproteins (LDL, VLDL, and HDL) and apolipoproteins (APOA1/A2, APOB, APOEs, and others) and enhances their uptake by microglial cells. TREM-2 plays a key role in the functions of microglia, such as phagocytosis, cytokines release, lipid sensing, and microglia proliferation and migration. TREM2 has both anti-inflammatory and pro-inflammatory effects. In in vivo models of Alzheimer's disease (AD), TREM2 serves as a reliable indicator of microglial activation, and mutations in TREM-2 have been associated with an increased risk of neurodegenerative diseases like AD, ALS, and Parkinson's disease (PD). Tumor-infiltrating macrophages and various types of cancer cells also express TREM2 at varying levels in cancers. TREM-2 suppresses anti-tumor immune responses by inhibiting T cell-mediated immune responses and through its effects on NK cell-mediated anti-tumor immunity. In tumor immune microenvironment (TME), TREM2 is a key regulator, and its blockade can promote the response to anti-PD1 therapy. This recombinant anti-mouse TREM-2 (antibody has been shown to block TREM-2 signals in vivo in murine tumor models.

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/cp067?bxcs=9k1b3a#tab_references or scan the QR code below.



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