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
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 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 Fcγ 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 PLOSL2. 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.

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

N