Technical Data Sheet

InVivoMAb anti-mouse TREM-2

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:	**BE0447**
Clone:	**178**
Isotype:	Rat IgG2a, κ
Recommended Isotype Control(s):	InVivoMAb rat IgG2a isotype control, anti-trinitrophenol
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:	Flow cytometry ELISA in vitro TREM-2 blockade in vivo TREM-2 blockade (see description)*
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 filtered
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	
Molecular Weight:	150 kDa

Description

The 178 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. *An engineered recombinant mouse variant of the rat IgG2a anti-mouse TREM-2 (clone 178) antibody with mouse

IgG constant domains and a LALA-PG Fc silencing mutation has been shown to block TREM-2 signals in vivo in murine tumor models. BE0447 is the original 178 clone with rat IgG constant domains. The recombinant variant is available here: https://bioxcell.com/recombimab-anti-mouse-trem-2-lala-pg-cp067.

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

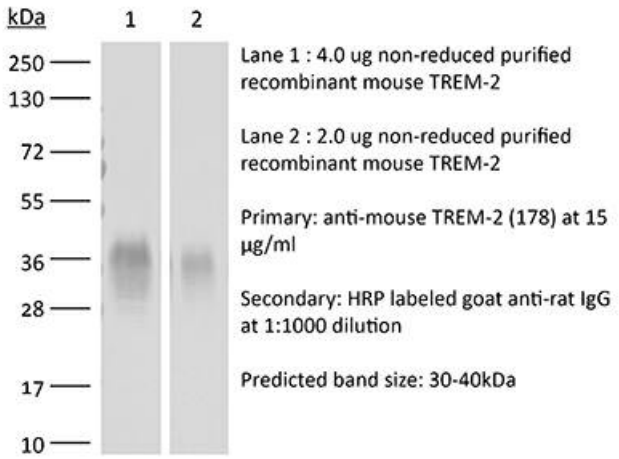
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/be0447?bxcs=9k1b3a#tab_references or scan the QR code below.

Binding Validation

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail technicalservice@bioxcell.com.



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

Conditions: For research use only. Not for use in diagnostic or therapeutic procedures.
Not for resale.
Bio X Cell, Bio X Cell logo, and all other trademarks are the property of Bio X Cell, LLC © 2025 Bio X Cell, LLC