

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name TREM-1, Mouse, clone L5-B8, FITC conjugated

Catalog number HM1098F

Lot number **Expiry date**

Volume 1 ml **Amount** 100 μg

Formulation 0.2 µm filtered in PBS+1%BSA+0.02%NaN3 Concentration 100 μg/ml

Host Species Rat IgG2a Conjugate **FITC**

Endotoxin N.A. Purification Protein G

4°C Storage

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes			•	•	•			•
No		•						
N.D.	•					•	•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

General Information

Description

The monoclonal antibody L5-B8 recognizes mouse triggering receptor expressed on myeloid cells-1 (TREM-1). TREM-1 is a 30 kDa monomeric transmembrane activating receptor. TREM-1 is a member of the immunoglobulin superfamily. TREM-1 is expressed at low levels in the early development of the hematopoietic system in the promonoistic stage, and at high levels on the surface of immune cells, including neutrophils, monocytes and macrofages. TREM-1 is synthesized as a 234 amino acid (aa) precursor with a signal peptide (16 aa), an extracellular domain (184 aa), a transmembrane domain (29 aa), and a short cytoplasmic domain (5 aa). The short intracellular domain associates with a signal-transduction molecule, DNAX-activation protein 12 (DAP12), triggering the secretion of inflammatory cytokines that amplify the host response to microbial agents. TREM-1 acts in synergy with Toll-like receptor signaling pathways in amplifying the inflammatory response. Platelets express a natural ligand for TREM-1.

The expression of TREM-1 is greatly upregulated on phagocytic cells in the presence of bacteria and fungi. TREM-1 has a role in sepsis, inflammatory bowel disease (IBD) and multiple sclerosis. In contrast, TREM-1 is not upregulated in samples from patients with non-inefctious inflammatory conditions. During infections, receptor expression is modulated and soluble TREM-1 (sTREM-1, 17 kDa) is released. TREM-1 is shed from the membrane of activated phagocytes and can be found as sTREM-1 in body fluids like plasma and bronchoalveolar lavage fluid (BAL).

Elavated levels of sTREM-1 have a accuracy and sensitivity in detecting microbial infections as underlying disease. Furthermore, sTREM-1 has been associated with non-infectious inflammatory conditions like major abdominal surgery,

peptic ulcer disease and COPD.

Immunogen Mouse TREM-1-human IgG-Fc fusion protein

Aliases TREM-1, triggering receptor expressed on myeloid cells, TREM1

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent

infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Robbert Zwinkels

Date 15/03/2018

Version: 12-2017

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com .

Version: 12-2017