

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name CLM-5, Mouse, clone TX69

Catalog number HM1147-100UG

Lot number **Expiry date**

100 μg Volume 1 ml **Amount**

Formulation 0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3 Concentration 100 μg/ml

Host Species Rat IgG2a Conjugate None

NΑ 4°C Storage

Application notes

Purification

Protein G

Version: 06-2020

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #				1				
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.

- FC: Extracellulair staining of CLM-5 with TX69.
- W: Western blot was performed under reduced conditions. The expected band size is 35 kDa.

General Information

Description

Aliases

Endotoxin

HM1147 (clone TX69) is a monoclonal antibody against mouse CLM-5. This molecule, also known as MAIR-IV, LMIR4 or CD300ld1, is a member of the myeloid-associated immunoglobulin-like receptor family (MAIR, CD300). The CD300 family of receptors is an evolutionary conserved receptor family that belongs to the Ig superfamily and is expressed predominantly by the myeloid lineage. In mice, nine members have been reported with different nomenclature systems, such as myeloid-associated Ig-like receptor (MAIR), leukocyte mono-Ig-like receptor (LMIR), DC-derived Ig-like receptor (DIgR), and CMRF-35-like molecule (CLM). CD300 molecules act as either activating or inhibitory receptors through interactions with adaptor molecules, such as PAD12, DAP10, and FcRy. CLM-5 is preferentially expressed on Gr-1+/Mac-1+ neutrophils in the peripheral blood, bone marrow, peritoneal cavity, and spleen. It is also found on Mac-1+/Gr-1+ macrophages and CD11c+ dendritic cells. Its expression is regulated by TLR ligands LPS and flagellin. In association with the immunoreceptor tyrosine based activating motif (ITAM)-bearing adaptor FcRy, CLM-5 mediates activation signals for neutrophils thereby playing an important role for innate immunity such as the induction of proinflammatory cytokines TNF-a and IL-6.

Mouse T cell leukemia cell line BW5147 transfected with Flag-tagged MAIR-IV (Ref.1) **Immunogen**

CMRF35-like molecule 5, MAIR-IV, CD300 antigen-like family member D, Leukocyte mono-Ig-like receptor 4, Myeloid-

associated immunoglobulin-like receptor 4, CD300ld1.

Gene Gene name: Cd300ld Entrez ID: 217305 Uniprot: Q8VCH2

References Nakano, T et al; Activation of neutrophils by a novel triggering immunoglobulin-like receptor MAIR-IV. Mol

Immunol 2008; 45: 289

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 Brenda Teunissen

Date 24/07/2020

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