

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	CLM-8, Mouse, clone TX41	Expiry date	-
Catalog number	HM1145-20UG		
Lot number	-	Amount	20 µg
Volume	200 µl	Concentration	100 µg/ml
Formulation	0.2 µm filtered in PBS+0.1%BSA	Conjugate	None
Host Species	Rat IgG2a	Purification	Protein G
Endotoxin	<24 EU/ml		
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #				1	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: Extracellular staining of CLM-8 with TX41.
- FS: monoclonal antibody TX41 was used as neutralizing antibody (Ref.1)

General Information

Description	Antibody clone TX41 is a monoclonal antibody against mouse CLM-8, also known as CD300a. 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 FcRγ. In recent years data have shown that eosinophils express various Ig superfamily receptors that regulate key checkpoints in their biology including maturation, transition from the bone marrow to the peripheral blood, migration, adhesion, survival, and effector functions in response to numerous activating signals such as IL-4, IL-33, and bacteria. CD300a is an inhibitory receptor that is expressed by mast cells, neutrophils, peripheral eosinophils, dendritic cells, macrophages, and B cells. Its inhibitory signal depends on the phosphorylation of tyrosine residues embedded in ITIMs of the cytoplasmic tail and regulate a diverse array of immune cell processes. CD300a recognizes phosphatidylserine and phosphatidylethanolamine, two aminophospholipids exposed on the outer leaflet of dead and activated cells. This provided new insights regarding its role in the modulation of immune functions and in its participation in the host response to several diseases states, such as infectious diseases, cancer, allergy, and chronic inflammatory diseases.		
Immunogen	Recombinant protein		
Aliases	CMRF35-like molecule 8, MAIR-I, CD300 antigen-like family member A, Leukocyte mono-Ig-like receptor 1, Mast cell-derived paired immunoglobulin-like receptor 1, Myeloid-associated immunoglobulin-like receptor 1, CD300a.		
Gene	Gene name: Cd300a	Entrez ID: 217303	Uniprot: Q6SJQ0
References	1. Miki, H et al; Involvement of CD300a Phosphatidylserine Immunoreceptor in Aluminum Salt Adjuvant–Induced Th2 Responses. J Immunol 2015, 194		

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
13/11/2020

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