

Mouse anti-Human CD40 Ligand/CD154/TRAP1 Monoclonal Antibody | anti-CD40LG antibody

CD40 Ligand/CD154/TRAP1 (Activation Marker of T-Lymphocytes)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA23948	Mouse	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry

PRODUCT SYNONYMS

CD40 Ligand/CD154/TRAP1; Monoclonal Antibody; CD40 Ligand/CD154/TRAP1 (Activation Marker of T-Lymphocytes); CD154; gp39; hCD40L; HIGM1; IGM; IMD3; T B cell activating molecule; T BAM; T-cell antigen Gp39; TNF-related activation protein;TrAP; Tumor necrosis factor ligand superfamily member 5 (TNFSF5); anti-CD40LG antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	CD40LG/2763
Specificity	CD40LG expression is mainly confined to the CD4-positive-T-cell subset. Its expression is induced shortly after T-cell activation and represents an early activation marker of T lymphocytes. CD40 is constitutively expressed mainly on B cells, macrophages, and dendritic cells. The CD40-CD40L pathway has been shown to play multiple functional roles in the healthy immune system. It enhances the antigen-specific T-cell response through the activation of dendritic cells and the induction of interleukin-12 production. For example, engagement of CD40 on endothelial cells by activated T cells expressing CD40L leads to upregulation of adhesion molecules such as ICAM-1, VCAM-1, and E-selectin. Activation of APC by CD40-CD40L interaction induces the production of inflammatory cytokines, chemokines, NO, and metalloproteinases. Interaction of CD4-positiveCD40LG-positiveT cells with CD40 on B cells leads to B-cell differentiation, proliferation, immunoglobulin (Ig) isotype switching, and formation of memory B cells.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	261
Applicable Applications for anti-CD40LG antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry)
Application Notes	ELISA: For coating, order antibody without BSA FC/FACS: 1-2ug/million cells IF: 1-2ug/ml Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT) (Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes)
Positive Control	Jurkat cells. Human tonsil, spleen or thymus tissue (IHC).
Immunogen	Recombinant fragment of human CD40LG protein (around aa 108-261) (exact sequence is proprietary)
Cellular Localization	Cell Surface. Secreted.
Hu-chromosome Location	Xq26.3

Preparation and Storage

Antibody with azide: store at 2 to 8 degree C.
Antibody without azide: store at -20 to -80 degree C.
Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



Application Data

Analysis of Protein Array containing more than 19,000 full-length human proteins using CD40 Mouse Ligand Monoclonal Antibody (CD40LG/2763) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



FCM (Flow Cytometry)

Flow Cytometric Analysis of Jurkat cells using CD40 Ligand Mouse Monoclonal Antibody (CD40LG/2763) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



IF (Immunofluorescence)

Immunofluorescence staining of Jurkat cells using CD40 Ligand Mouse Monoclonal Antibody (CD40LG/2763) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.



SDS-PAGE

SDS-PAGE Analysis Purified CD40 Ligand Mouse Monoclonal Antibody (CD40LG/2763). Confirmation of Integrity and Purity of Antibody.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Spleen stained with CD40 Ligand Mouse Monoclonal Antibody (CD40LG/2763).



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Spleen stained with CD40 Ligand Mouse Monoclonal Antibody (CD40LG/2763).

ADDITIONAL INFORMATION

References

Howland, K. C., et al. 2000. J. Immunol.164:4465-4470.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557433
NCBI GeneID	959
NCBI Accession #	NP_000065.1
NCBI GenBank Nucleotide #	NP_000065.1
UniProt Accession #	P29965
Molecular Weight	36kDa
NCBI Official Full Name	CD40 ligand
NCBI Official Synonym Full Names	CD40 ligand
NCBI Official Symbol	CD40LG

NCBI Official Synonym Symbols	IGM; IMD3; TRAP; gp39; CD154; CD40L; HIGM1; T-BAM; TNFSF5; hCD40L
NCBI Protein Information	CD40 ligand
UniProt Protein Name	CD40 ligand
UniProt Gene Name	CD40LG
UniProt Synonym Gene Names	CD40L; TNFSF5; TRAP; CD40-L; TRAP
UniProt Entry Name	CD40L_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/cd40-ligand-cd154-trap1-antibody-clone-cd40lg-2763-flow-cytometry-immunofluorescence-immunohistochemistry-elisa/23948>