

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

Mouse Monoclonal Antibody [Clone CD40LG/2761]

Catalog No	Format	Size
959-MSM1-B1	Purified Ab conjugated to Biotin	0.5 ml at 100ug/ml

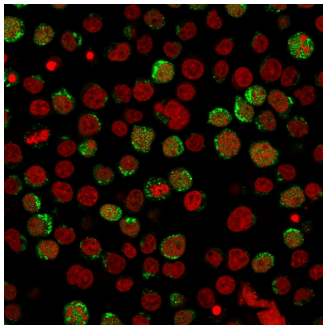
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

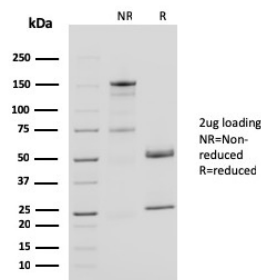
Clone	CD40LG/2761
Gene Name	CD40LG
Immunogen	Recombinant fragment (around aa 108-261) of human CD40LG protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b
Mol. Weight of Antigen	36kDa
Cellular Localization	Cell membrane, Cell surface, Secreted
Species Reactivity	Human
Positive Control	Jurkat cells. Tonsil

*Optimal dilution for a specific application should be determined.

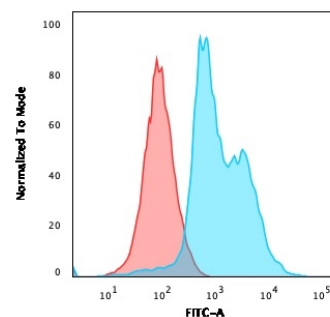
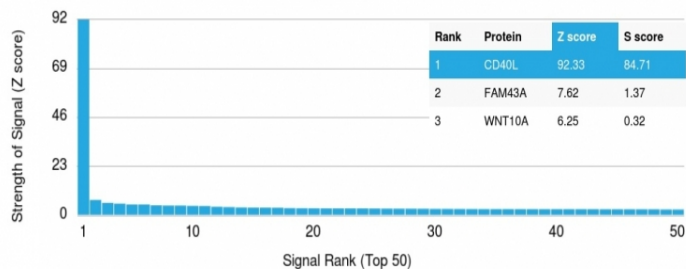
Product Images for CD40 Ligand / CD154 / TRAP1 (Activation Marker of T-Lymphocytes) Antibody



Immunofluorescent staining of paraformaldehyde-fixed Jurkat cells using CD40L Mouse Monoclonal Antibody (CD40LG/2761) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.



SDS-PAGE Analysis Purified CD40L Mouse Monoclonal Antibody (CD40LG/2761). Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteins using CD40-Ligand Mouse Monoclonal Antibody (CD40LG/2761) 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 be 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.

Flow Cytometric Analysis of Jurkat cells using CD40L-Monospecific Mouse Monoclonal Antibody (CD40LG/2761) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

Specificity & Comments

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-positive CD40LG-positive T cells with CD40 on B cells leads to B-cell differentiation, proliferation, immunoglobulin (Ig) isotype switching, and formation of memory B cells.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

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.

Storage and Stability

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

Research Areas

AKT Signaling, Apoptosis, Autophagy, Cardiovascular, Cytokine Signaling, Immunology