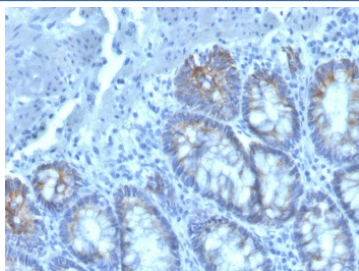


CD40 Ligand Antibody [clone CD40LG/2761] (V7385BTN)

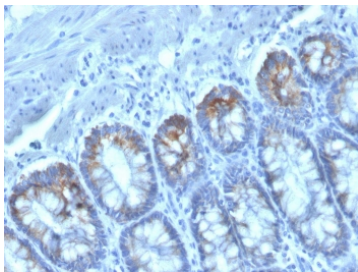
Catalog No.	Formulation	Size
V7385BTN	0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	500 ul

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Biotin Conjugate
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	CD40LG/2761
Purity	Protein G affinity chromatography
UniProt	P29965
Localization	Cell surface, secreted
Applications	ELISA : order Ab without BSA for coating Flow Cytometry : 2-4ug/million cells Immunofluorescence : 2-4ug/ml Western Blot : 2-4ug/ml Immunohistochemistry (FFPE) : 2-4ug/ml for 30 minutes at RT
Limitations	This CD40 Ligand antibody is available for research use only.



IHC testing of FFPE human colon with CD40 Ligand antibody (clone CD40LG/2761).
 HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

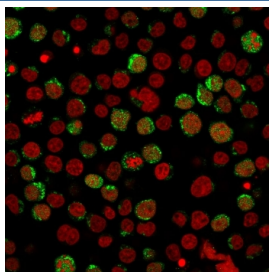


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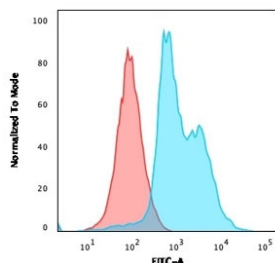
Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD40 Ligand antibody (clone CD40LG/2761). These results demonstrate the foremost specificity of the CD40LG/2761 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



Immunofluorescent staining of paraformaldehyde-fixed human Jurkat cells with unlabeled CD40 Ligand antibody (green, clone CD40LG/2761) and Reddot nuclear stain (red).



Flow testing of human Jurkat cells with unlabeled CD40 Ligand antibody (blue) and isotype control (red).

Description

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.

Application Notes

Optimal dilution of the CD40 Ligand antibody should be determined by the researcher.

Immunogen

A portion of amino acids 108-261 from the human protein was used as the immunogen for the CD40 Ligand antibody.

Storage

Store the CD40 Ligand antibody at 2-8oC (up to one month) or aliquot and store at -20oC (longer term).