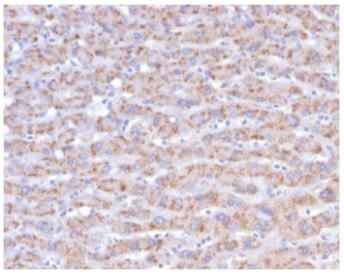
CD40L Antibody / TRAP / CD154 [clone CD40LG/4675] (V8828)

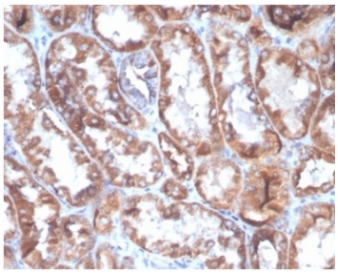
Catalog No.	Formulation	Size
V8828-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8828-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8828SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

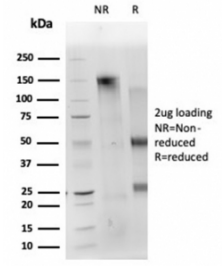
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CD40LG/4675
Purity	Protein A/G affinity
UniProt	P29965
Localization	Cell surface,Secreted
Applications	Immunohistochemistry (FFPE): 2-4ug/ml
Limitations	This CD40L antibody is available for research use only.



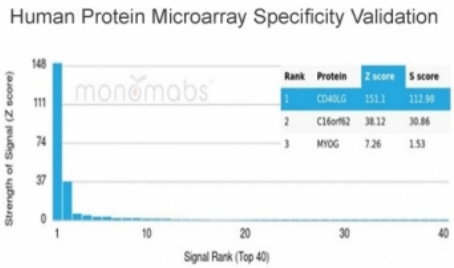
IHC staining of FFPE human liver carcinoma in colon tissue with CD40L antibody (clone CD40LG/4675) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human kidney tissue with CD40L (clone D40LG/4675) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free CD40L antibody (CD40LG/4675) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD40L antibody (clone CD40LG/4675). These results demonstrate the foremost specificity of the CD40LG/4675 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.

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.

CD40L, also known as CD154 and TNFSF5, mediates immune costimulatory signaling through CD40; additional information on this pathway and target biology is available on the CD40 Ligand Antibody page.

Application Notes

Optimal dilution of the CD40L antibody should be determined by the researcher.

Immunogen

A portion of amino acids 108-261 was used as the immunogen for the CD40L antibody.

Storage

Aliquot the CD40L antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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