10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CD40L Rabbit pAb

CD40L Rabbit pAb
Catalog # AP52184

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P29965
Reactivity	Rat, Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29274
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CD40L
Epitope Specificity	31-150/261
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted and Cell membrane.
DISEASE	Defects in CD40LG are the cause of X-linked immunodeficiency with hyper-IgM type 1 (HIGM1) [MIM:308230]; also known as X-linked hyper IgM syndrome (XHIM). HIGM1 is an immunoglobulin isotype switch defect characterized by elevated concentrations of serum IgM and decreased amounts of all other isotypes. Affected males present at an early age (usually within the first year of life) recurrent bacterial and opportunistic infections, including Pneumocystis carinii pneumonia and intractable diarrhea due to cryptosporidium infection. Despite substitution treatment with intravenous immunoglobulin, the overall prognosis is rather poor, with a death rate of about 10% before adolescence.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CD40 ligand (CD40L) is a 33 kDa type II membrane glycoprotein expressed mainly on the cell surface of activated T lymphocytes, but also exists as a soluble form extracellularly. CD40L is the ligand for CD40, a member of the TNF superfamily, which is expressed on the cell surface of B cells, macrophages/monocytes, dendritic cells, vascular endothelial cells, and epithelial cells. CD40L plays an important role in B cell proliferation, antibody class switching, modulation of apoptosis in the germinal center through interaction with B cells expressing CD40, and activation of CD4+ T cells. Mutation within the CD40L gene is linked to hyper IgM syndrome, an X linked immunodeficiency disease that is characterized by elevated level of serum IgM and decreased level of other isotypes.

Additional Information

Gene ID	959

Other Names	CD40 ligand, CD40-L, T-cell antigen Gp39, TNF-related activation protein, TRAP, Tumor necrosis factor ligand superfamily member 5, CD154, CD40 ligand, membrane form, CD40 ligand, soluble form, sCD40L, CD40LG, CD40L, TNFSF5, TRAP
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CD40LG
Synonyms	CD40L, TNFSF5, TRAP
Function	Cytokine that acts as a ligand to CD40/TNFRSF5 (PubMed: 1280226, PubMed:31331973). Costimulates T-cell proliferation and cytokine production (PubMed:8617933). Its cross-linking on T-cells generates a costimulatory signal which enhances the production of IL4 and IL10 in conjunction with the TCR/CD3 ligation and CD28 costimulation (PubMed:8617933). Induces the activation of NF-kappa-B (PubMed:15067037, PubMed:31331973). Induces the activation of kinases MAPK8 and PAK2 in T-cells (PubMed:15067037). Induces tyrosine phosphorylation of isoform 3 of CD28 (PubMed:15067037). Mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the presence of IL4 (By similarity). Involved in immunoglobulin class switching (By similarity).
Cellular Location	Cell membrane; Single-pass type II membrane protein. Cell surface
Tissue Location	Specifically expressed on activated CD4+ T- lymphocytes

Background

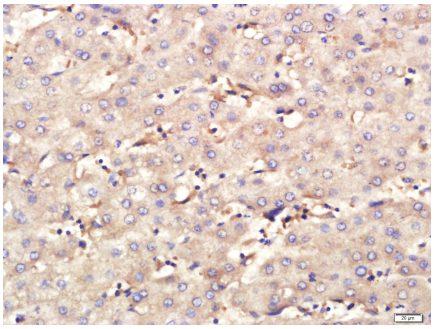
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

References

Graf D.,et al.Eur. J. Immunol. 22:3191-3194(1992).
Hollenbaugh D.,et al.EMBO J. 11:4313-4321(1992).
Aruffo A.,et al.Cell 72:291-300(1993).
Spriggs M.K.,et al.J. Exp. Med. 176:1543-1550(1992).
Gauchat J.-F.,et al.FEBS Lett. 315:259-266(1993).

Images

Paraformaldehyde-fixed, paraffin embedded (human liver cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody



incubation with (CD40L) Polyclonal Antibody, Unconjugated (AP52184) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.