

CD70 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14744c

Product Information

Application	WB, IHC-P, E
Primary Accession	P32970
Other Accession	NP_001243.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34943
Calculated MW	21118
Antigen Region	72-101

Additional Information

Gene ID	970
Other Names	CD70 antigen, CD27 ligand, CD27-L, Tumor necrosis factor ligand superfamily member 7, CD70, CD70, CD27L, CD27LG, TNFSF7
Target/Specificity	This CD70 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 72-101 amino acids from the Central region of human CD70.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD70 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD70 (HGNC:11937)
Function	Expressed at the plasma membrane of B cells, it is the ligand of the CD27 receptor which is specifically expressed at the surface of T cells (PubMed: 28011863 , PubMed: 28011864 , PubMed: 8387892). The CD70- CD27

signaling pathway mediates antigen-specific T cell activation and expansion which in turn provides immune surveillance of B cells (PubMed:[28011863](#), PubMed:[28011864](#)).

Cellular Location

Cell membrane; Single-pass type II membrane protein

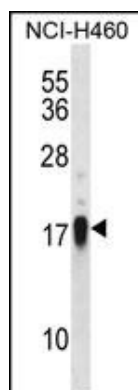
Background

The protein encoded by this gene is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. This cytokine is a ligand for TNFRSF27/CD27. It is a surface antigen on activated, but not on resting, T and B lymphocytes. It induces proliferation of costimulated T cells, enhances the generation of cytolytic T cells, and contributes to T cell activation. This cytokine is also reported to play a role in regulating B-cell activation, cytotoxic function of natural killer cells, and immunoglobulin synthesis.

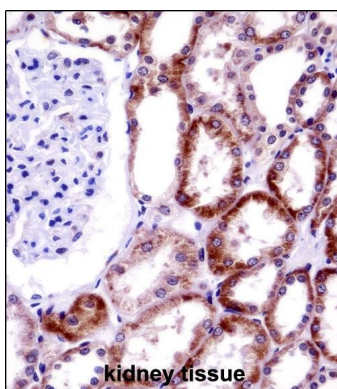
References

Arimoto-Miyamoto, K., et al. Immunology 130(1):137-149(2010)
Shaw, J., et al. Blood 115(15):3051-3057(2010)
Yu, S.E., et al. Mol. Cells 29(2):217-221(2010)
Kozłowska, A., et al. J. Rheumatol. 37(1):53-59(2010)
Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :

Images



CD70 Antibody (Center) (Cat. #AP14744c) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the CD70 antibody detected the CD70 protein (arrow).



CD70 Antibody (Center) (AP14744c) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CD70 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- [Inherited CD70 deficiency in humans reveals a critical role for the CD70-CD27 pathway in immunity to Epstein-Barr virus infection.](#)

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