

# 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 72-101 **Antigen Region** 

## **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 ( <u>HGNC:11937</u>)

**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:<u>28011863</u>, PubMed:<u>28011864</u>, PubMed:<u>8387892</u>). 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

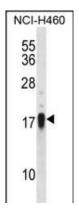
# **Background**

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 sythesis.

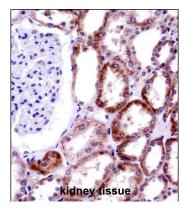
### References

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) Kozlowska, 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'.