

#### **CD70 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14744c

#### Specification

# CD70 Antibody (Center) - Product Information

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

# **CD70 Antibody (Center) - 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~~1:10~50 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.

# CD70 Antibody (Center) - 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:<u>28011863</u>, PubMed:<u>28011864</u>).

**Cellular Location** 

Cell membrane; Single-pass type II membrane protein

# CD70 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **CD70 Antibody (Center) - 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.

# CD70 Antibody (Center) - 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.

# **CD70 Antibody (Center) - 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) : **CD70 Antibody (Center) - Citations** 

• Inherited CD70 deficiency in humans reveals a critical role for the CD70-CD27 pathway in immunity to Epstein-Barr virus infection.