

#### CD27 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13740b

#### Specification

# CD27 Antibody (C-term) - Product Information

Application Primary Accession	FC, WB,E <u>P26842</u>
Other Accession	<u>NP_001233.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	29137
Antigen Region	196-225

#### CD27 Antibody (C-term) - Additional Information

Gene ID 939

**Other Names** CD27 antigen, CD27L receptor, T-cell activation antigen CD27, T14, Tumor necrosis factor receptor superfamily member 7, CD27, CD27, TNFRSF7

Target/Specificity

This CD27 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 196-225 amino acids from the C-terminal region of human CD27.

**Dilution** FC~~1:10~50 WB~~1:1000 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

CD27 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## CD27 Antibody (C-term) - Protein Information

Name CD27 (<u>HGNC:11922</u>)



**Function** Costimulatory immune-checkpoint receptor expressed at the surface of T-cells, NK-cells and B-cells which binds to and is activated by its ligand CD70/CD27L expressed by B-cells (PubMed:<u>28011863</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>). Mechanistically, CD70 ligation activates the TRAF2-PTPN6 axis that subsequently inhibits LCK phosphorylation to promote phenotypic and transcriptional adaptations of T-cell memory (PubMed:<u>38354704</u>). In addition, activation by CD70 on early progenitor cells provides a negative feedback signal to leukocyte differentiation during immune activation and thus modulates hematopoiesis (By similarity). Negatively regulates the function of Th2 lymphocytes in the adipose tissue (By similarity).

**Cellular Location** Cell membrane; Single-pass type I membrane protein

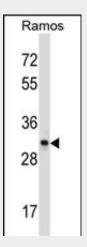
**Tissue Location** Found in most T-lymphocytes.

## **CD27 Antibody (C-term) - Protocols**

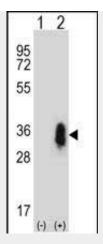
Provided below are standard protocols that you may find useful for product applications.

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

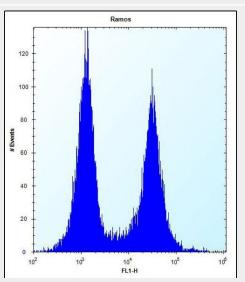
# CD27 Antibody (C-term) - Images



CD27 Antibody (C-term) (Cat. #AP13740b) western blot analysis in Ramos cell line lysates (35ug/lane).This demonstrates the CD27 antibody detected the CD27 protein (arrow).



Western blot analysis of CD27 (arrow) using rabbit polyclonal CD27 Antibody (C-term) (Cat. #AP13740b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CD27 gene.



CD27 Antibody (C-term) (Cat. #AP13740b) flow cytometric analysis of Ramos cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

## CD27 Antibody (C-term) - Background

The protein encoded by this gene is a member of the TNF-receptor superfamily. This receptor is required for generation and long-term maintenance of T cell immunity. It binds to ligand CD70, and plays a key role in regulating B-cell activation and immunoglobulin synthesis. This receptor transduces signals that lead to the activation of NF-kappaB and MAPK8/JNK. Adaptor proteins TRAF2 and TRAF5 have been shown to mediate the signaling process of this receptor. CD27-binding protein (SIVA), a proapoptotic protein, can bind to this receptor and is thought to play an important role in the apoptosis induced by this receptor.

## CD27 Antibody (C-term) - References

Jiang, J., et al. J. Clin. Immunol. 30(4):566-573(2010) Arimoto-Miyamoto, K., et al. Immunology 130(1):137-149(2010)



Mizuochi, T., et al. J. Interferon Cytokine Res. 30(4):243-252(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010) Neron, S., et al. Arch. Immunol. Ther. Exp. (Warsz.) 57(6):447-458(2009)