

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

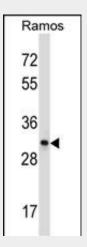
Tissue Location Found in most T-lymphocytes.

CD27 Antibody (C-term) - Protocols

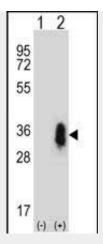
Provided below are standard protocols that you may find useful for product applications.

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

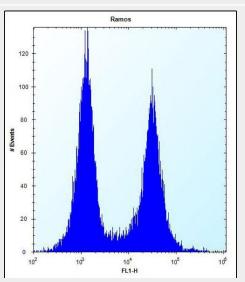
CD27 Antibody (C-term) - Images



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)