

Anti-TNFRSF7/CD27 Picoband Antibody
Catalog # ABO12616**Specification**

Anti-TNFRSF7/CD27 Picoband Antibody - Product Information

Application	WB, IHC-P, IHC-F, FC, ICC
Primary Accession	P26842
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for CD27 antigen(CD27) detection. Tested with WB, IHC-P, IHC-F, ICC, FCM in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TNFRSF7/CD27 Picoband Antibody - 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

Calculated MW

29137 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml
Immunocytochemistry, 0.5-1 µg/ml
Western blot, 0.1-0.5 µg/ml
Flow Cytometry, 1-3¼g/1x10⁶ cells

Subcellular Localization

Membrane; Single-pass type I membrane protein.

Tissue Specificity

Found in most T-lymphocytes.

Protein Name

CD27 antigen

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E. coli-derived human CD27 recombinant protein (Position: A20-R191). Human CD27 shares 62.8%

amino acid (aa) sequence identity with mouse CD27.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-TNFRSF7/CD27 Picoband Antibody - Protein Information

Name CD27 ([HGNC:11922](#))

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: [28011863](http://www.uniprot.org/citations/28011863)). The CD70-CD27 signaling pathway mediates antigen-specific T-cell activation and expansion which in turn provides immune surveillance of B-cells (PubMed: [28011863](http://www.uniprot.org/citations/28011863)). Mechanistically, CD70 ligation activates the TRAF2-PTPN6 axis that subsequently inhibits LCK phosphorylation to promote phenotypic and transcriptional adaptations of T-cell memory (PubMed: [38354704](http://www.uniprot.org/citations/38354704)). 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

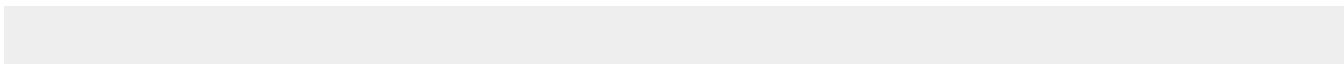
Tissue Location

Found in most T-lymphocytes.

Anti-TNFRSF7/CD27 Picoband Antibody - Protocols

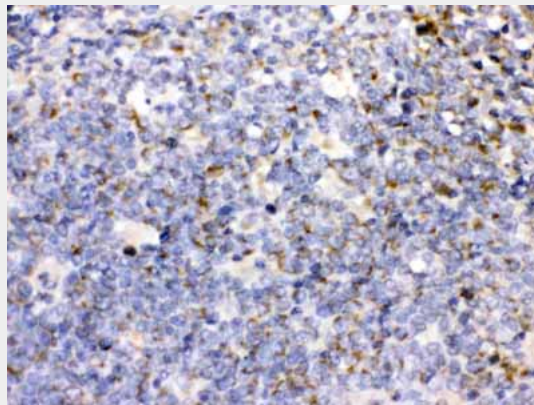
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TNFRSF7/CD27 Picoband Antibody - Images



Western blot analysis of CD27 expression in HELA whole cell lysates (lane 1). CD27 at 51KD was detected using rabbit anti- CD27 Antigen Affinity purified polyclonal antibody (Catalog # ABO12616) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



CD27 was detected in paraffin-embedded sections of human tonsil tissues using rabbit anti- CD27 Antigen Affinity purified polyclonal antibody (Catalog # ABO12616) at 1 µg/mL. The immunohistochemical section was developed using SABC method .

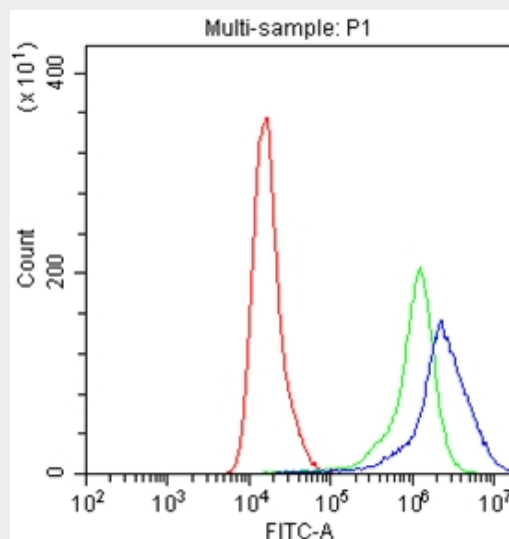


Figure 3. Flow Cytometry analysis of A549 cells using anti-CD27 antibody (ABO12616). Overlay histogram showing A549 cells stained with ABO12616 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD27 Antibody (ABO12616, 1 µg/1x10⁶ cells) for 30 min at 20°C. DyLight 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 µg/1x10⁶

cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-TNFRSF7/CD27 Picoband Antibody - Background

CD27 is a member of the tumor necrosis factor 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. And 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.