

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

Application	WB, IHC, FC
Primary Accession	<a href="#">P26842</a>
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, 1-3<sup>1</sup>/<sub>4</sub>g/1x10<sup>6</sup> 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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**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

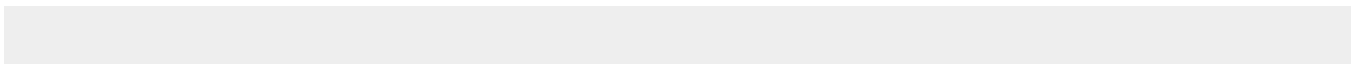
**Tissue Location**

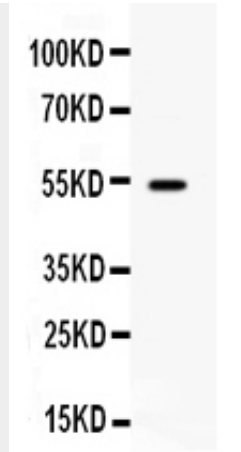
Found in most T-lymphocytes.

**Anti-TNFRSF7/CD27 Picoband Antibody - Protocols**

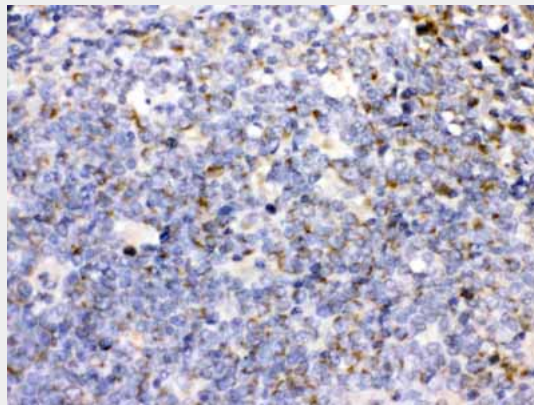
Provided below are standard protocols that you may find useful for product applications.

- [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 .

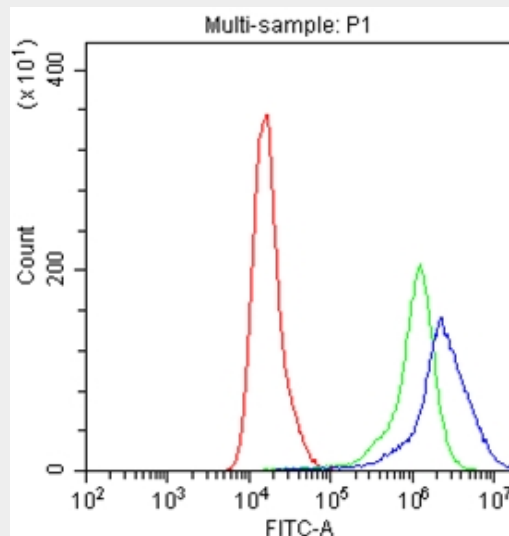


Figure 3. Flow Cytometry analysis of A549 cells using anti-CD27 antibody (ABO12616). Overlay histogram showing A549 cells stained with ABO12616 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD27 Antibody (ABO12616, 1 µg/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight<sup>®</sup>488 conjugated goat anti-rabbit IgG (BA1127, 5-10 µg/1x10<sup>6</sup>

cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 $\mu$ g/1x10<sup>6</sup>) 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.