

## Anti-CD27 (Tumor Necrosis Factor Receptor Superfamily 7) Antibody

Mouse Monoclonal Antibody Catalog # AH13616

## **Specification**

# Anti-CD27 (Tumor Necrosis Factor Receptor Superfamily 7) Antibody - Product Information

**Application** ,14,3,4, **Primary Accession** P26842 Other Accession 355307 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype Mouse / IgG1 Calculated MW 29137

# Anti-CD27 (Tumor Necrosis Factor Receptor Superfamily 7) Antibody - Additional Information

### Gene ID 939

### **Other Names**

LPFS2; S152; T cell activation antigen S152; T-cell activation antigen CD27; T14; TNFRSF7; TNFSF7; Tp55; Tumor necrosis factor receptor superfamily member 7

### **Format**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

### **Precautions**

Anti-CD27 (Tumor Necrosis Factor Receptor Superfamily 7) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Anti-CD27 (Tumor Necrosis Factor Receptor Superfamily 7) 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:<a href="http://www.uniprot.org/citations/28011863" target="\_blank">28011863</a>). The CD70-CD27 signaling pathway mediates antigen- specific T-cell activation and expansion which in turn provides immune surveillance of B-cells (PubMed:<a

href="http://www.uniprot.org/citations/28011863" target="blank">28011863</a>).





Mechanistically, CD70 ligation activates the TRAF2-PTPN6 axis that subsequently inhibits LCK phosphorylation to promote phenotypic and transcriptional adaptations of T-cell memory (PubMed:<a href="http://www.uniprot.org/citations/38354704" target="\_blank">38354704</a>). 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**

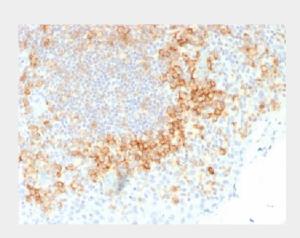
Found in most T-lymphocytes.

### Anti-CD27 (Tumor Necrosis Factor Receptor Superfamily 7) Antibody - Protocols

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

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

## Anti-CD27 (Tumor Necrosis Factor Receptor Superfamily 7) Antibody - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD27 Monoclonal Antibody (LPFS2/1611).

## Anti-CD27 (Tumor Necrosis Factor Receptor Superfamily 7) Antibody - Background

Recognizes a protein of a disulfide-linked 120kDa dimer, identified as CD27. It is expressed on the majority of peripheral T cells, medullary thymocytes, memory-type B cells, and natural killer cells. It is a transmembrane phosphoglycoprotein that belongs to the tumor necrosis factor receptor (TNFR) superfamily. CD27 binds to its ligand CD70, a member of the TNF family, and induces T-cell co-stimulation and B-cell activation. It also interacts with TRAFs and is involved in activation of NFDB and SAPK/JNK and induces apoptosis.