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

Mouse Monoclonal Antibody
Catalog # AH13616

Product Information

Application	IHC-P, IF, FC
Primary Accession	P26842
Other Accession	355307
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1
Clone Names	LPFS2/1611
Calculated MW	29137

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
Application Note	Flow Cytometry (0.5-1ug/million cells); ,Immunofluorescence (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris buffer with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
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.

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). The CD70-CD27

signaling pathway mediates antigen- specific T-cell activation and expansion which in turn provides immune surveillance of B-cells (PubMed: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). 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).

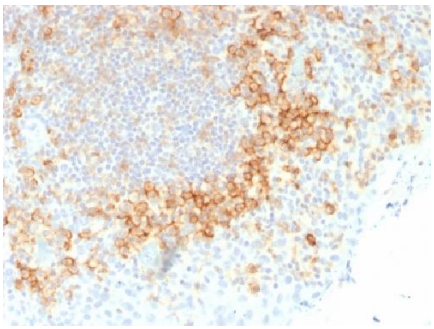
Cellular Location Cell membrane; Single-pass type I membrane protein

Tissue Location Found in most T-lymphocytes.

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 NF □B and SAPK/JNK and induces apoptosis.

Images



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