

#### CD81 Rabbit mAb

**Catalog # AP78975** 

# **Specification**

#### CD81 Rabbit mAb - Product Information

Application

**Primary Accession** 

Reactivity

Host

Clonality

Isotype

Conjugate

Immunogen

Purification

Calculated MW

WB, IHC-P, IF, FC, ICC

P60033

Rat, Human, Mouse

Rabbit

**Monoclonal Antibody** 

IgG

Unconjugated

A synthesized peptide derived from human

CD81

**Affinity Chromatography** 

Calculated MW: 26 kDa; Observed MW: 26

kDa KDa

# CD81 Rabbit mAb - Additional Information

Gene ID 975

**Other Names** 

CD81

**Dilution** 

WB~~1/500-1/1000

IHC-P~~N/A

IF~~1:50~200

FC~~1:10~50

ICC~~N/A

## **Format**

Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.

## **Storage**

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## **CD81 Rabbit mAb - Protein Information**

Name CD81 {ECO:0000303|PubMed:8766544, ECO:0000312|HGNC:HGNC:1701}

### **Function**

Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling. Essential for trafficking and compartmentalization of CD19 receptor on the surface of activated B cells (PubMed:<a href="http://www.uniprot.org/citations/16449649" target="blank">16449649</a>,



PubMed:<a href="http://www.uniprot.org/citations/20237408" target=" blank">20237408</a>, PubMed: <a href="http://www.uniprot.org/citations/27881302" target="blank">27881302</a>). Upon initial encounter with microbial pathogens, enables the assembly of CD19-CR2/CD21 and B cell receptor (BCR) complexes at signaling TERMs, lowering the threshold dose of antigen required to trigger B cell clonal expansion and antibody production (PubMed: <a href="http://www.uniprot.org/citations/15161911" target=" blank">15161911</a>, PubMed:<a href="http://www.uniprot.org/citations/20237408" target="blank">20237408</a>). In T cells, facilitates the localization of CD247/CD3 zeta at antigen-induced synapses with B cells, providing for costimulation and polarization toward T helper type 2 phenotype (PubMed: <a href="http://www.uniprot.org/citations/22307619" target="\_blank">22307619</a>, PubMed:<a href="http://www.uniprot.org/citations/23858057" target="\_blank">23858057</a>, PubMed:<a href="http://www.uniprot.org/citations/8766544" target=" blank">8766544</a>). Present in MHC class II compartments, may also play a role in antigen presentation (PubMed: <a href="http://www.uniprot.org/citations/8409388" target=" blank">8409388</a>, PubMed:<a href="http://www.uniprot.org/citations/8766544" target="blank">8766544</a>). Can act both as positive and negative regulator of homotypic or heterotypic cell-cell fusion processes. Positively regulates sperm-egg fusion and may be involved in acrosome reaction (By similarity). In myoblasts, associates with CD9 and PTGFRN and inhibits myotube fusion during muscle

href="http://www.uniprot.org/citations/12796480" target="\_blank">12796480</a>). Also prevents the fusion of mononuclear cell progenitors into osteoclasts in charge of bone resorption (By similarity). May regulate the compartmentalization of enzymatic activities. In T cells, defines the subcellular localization of dNTPase SAMHD1 and permits its degradation by the proteasome, thereby controlling intracellular dNTP levels (PubMed:<a

regeneration (By similarity). In macrophages, associates with CD9 and beta-1 and beta-2 integrins,

and prevents macrophage fusion into multinucleated giant cells specialized in ingesting

complement-opsonized large particles (PubMed:<a

href="http://www.uniprot.org/citations/28871089" target="\_blank">28871089</a>). Also involved in cell adhesion and motility. Positively regulates integrin-mediated adhesion of macrophages, particularly relevant for the inflammatory response in the lung (By similarity).

## **Cellular Location**

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Note=Associates with CLDN1 and the CLDN1-CD81 complex localizes to the basolateral cell membrane

## **Tissue Location**

Expressed on B cells (at protein level) (PubMed:20237408). Expressed in hepatocytes (at protein level) (PubMed:12483205). Expressed in monocytes/macrophages (at protein level) (PubMed:12796480). Expressed on both naive and memory CD4- positive T cells (at protein level) (PubMed:22307619)

# CD81 Rabbit mAb - Protocols

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

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

# CD81 Rabbit mAb - Images



