

**Goat anti-CD81 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF4490a

## Specification

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### Goat anti-CD81 Antibody - Product Information

Application	FC, Pep-ELISA
Primary Accession	<a href="#">P60033</a>
Other Accession	<a href="#">NP_004347.1</a> , <a href="#">NP_001284578.1</a>
Reactivity	Human, Rat, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	25809

### Goat anti-CD81 Antibody - Additional Information

Gene ID 975

#### Other Names

CD81; CD81 antigen (target of antiproliferative antibody 1) ; HGNC:1701; S5.7; TAPA1 ; 26 kDa cell surface protein TAPA-1; CD81 antigen; target of antiproliferative antibody 1

#### Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Goat anti-CD81 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat anti-CD81 Antibody - 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 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/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 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)

### **Goat anti-CD81 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](#)

### **Goat anti-CD81 Antibody - Images**