

**CD81 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8567b****Specification**

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**CD81 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">P60033</a>
Other Accession	<a href="#">P60034</a>
Reactivity	Human, Rat
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	25809

**CD81 Antibody - Additional Information****Gene ID** 975**Other Names**

CD81 antigen, 26 kDa cell surface protein TAPA-1, Target of the antiproliferative antibody 1, Tetraspanin-28, Tspan-28, CD81, CD81, TAPA1, TSPAN28

**Target/Specificity**

This CD81 antibody is generated from a mouse immunized with a recombinant protein between 113-204 amino acids from the human CD81.

**Dilution**

WB~~1:4000

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

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

**Precautions**

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

**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:[16449649](#), PubMed:[20237408](#), PubMed:[27881302](#)). 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:[15161911](#), PubMed:[20237408](#)). 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:[22307619](#), PubMed:[23858057](#), PubMed:[8766544](#)). Present in MHC class II compartments, may also play a role in antigen presentation (PubMed:[8409388](#), PubMed:[8766544](#)). 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:[12796480](#)). 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:[28871089](#)). 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**

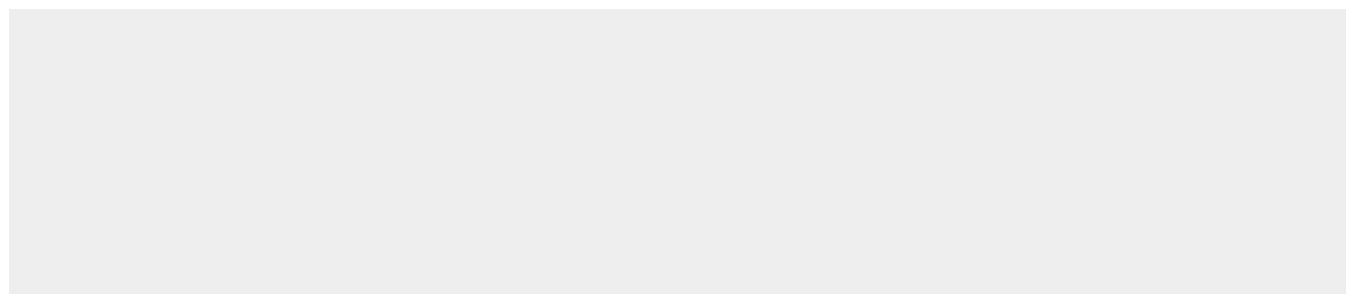
Expressed on B cells (at protein level) (PubMed:[20237408](#)). Expressed in hepatocytes (at protein level) (PubMed:[12483205](#)). Expressed in monocytes/macrophages (at protein level) (PubMed:[12796480](#)). Expressed on both naive and memory CD4- positive T cells (at protein level) (PubMed:[22307619](#))

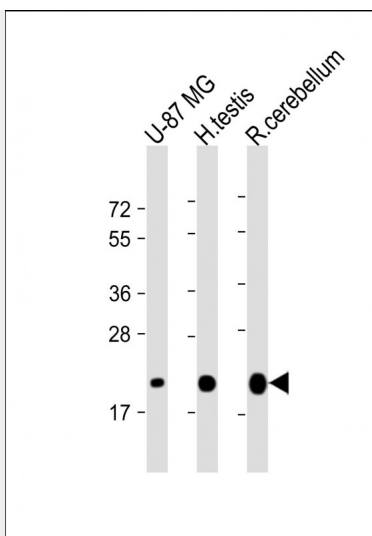
### **CD81 Antibody - Protocols**

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](#)

### **CD81 Antibody - Images**





All lanes : Anti-CD81 Antibody at 1:4000 dilution Lane 1: U-87 MG whole cell lysate Lane 2: human testis lysate Lane 3: rat cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### CD81 Antibody - Background

May play an important role in the regulation of lymphoma cell growth. Interacts with a 16-kDa Leu-13 protein to form a complex possibly involved in signal transduction. May act as the viral receptor for HCV.

### CD81 Antibody - References

Oren R.,et al.Mol. Cell. Biol. 10:4007-4015(1990).  
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.  
Livingston R.J.,et al.Submitted (OCT-2006) to the EMBL/GenBank/DDBJ databases.  
Taylor T.D.,et al.Nature 440:497-500(2006).  
Takahashi S.,et al.J. Immunol. 145:2207-2213(1990).

### CD81 Antibody - Citations

- [A Novel Urine Exosomal lncRNA Assay to Improve the Detection of Prostate Cancer at Initial Biopsy: A Retrospective Multicenter Diagnostic Feasibility Study](#)