

## Anti-CD81 Rabbit Monoclonal Antibody Catalog # ABO13428

### Specification

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#### Anti-CD81 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	<a href="#">P60033</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-CD81 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

#### Anti-CD81 Rabbit Monoclonal 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 {ECO:0000303|PubMed:8766544, ECO:0000312|HGNC:HGNC:1701}

#### Calculated MW

25809 MW KDa

#### Application Details

WB 1:1000-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:50

#### Subcellular Localization

Membrane; Multi-pass membrane protein.

#### Tissue Specificity

Hematolymphoid, neuroectodermal and mesenchymal tumor cell lines.

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human CD81

#### Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for

up to one month. Avoid repeated  
freeze-thaw cycles.

## Anti-CD81 Rabbit Monoclonal 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

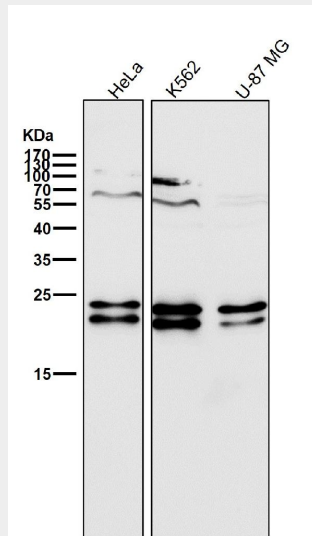
Expressed on B cells (at protein level) (PubMed:20237408). Expressed in hepatocytes (at protein level) (PubMed:12483205). Expressed in monocytes/macrophages (at protein level) (PubMed:12796480). Expressed on both naive and memory CD4- positive T cells (at protein level) (PubMed:22307619)

## Anti-CD81 Rabbit Monoclonal Antibody - Protocols

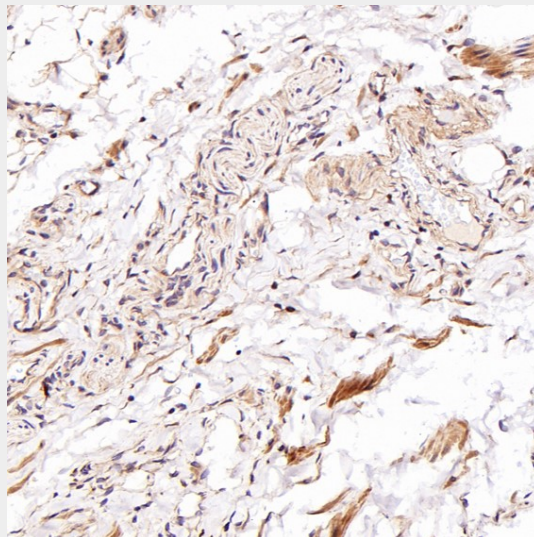
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

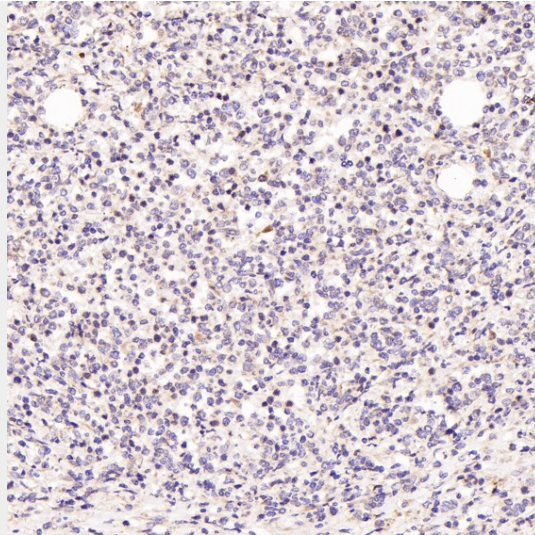
### Anti-CD81 Rabbit Monoclonal Antibody - Images



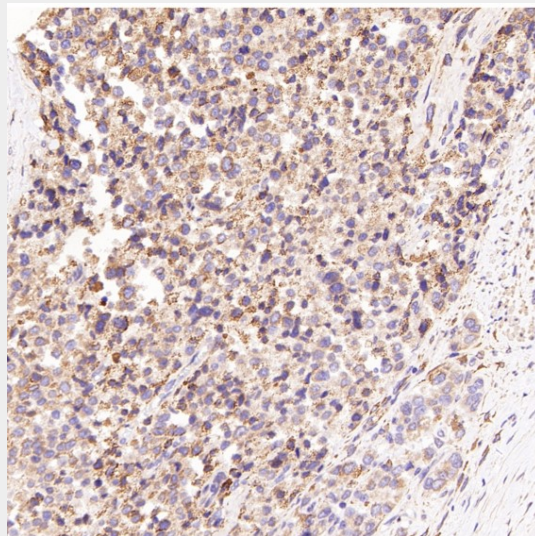
All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



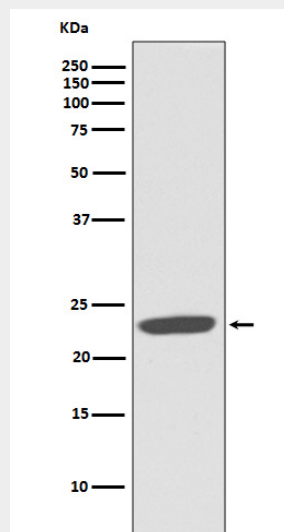
Immunohistochemical analysis of paraffin-embedded Human testis cancer, using the Antibody at 1:400 dilution.



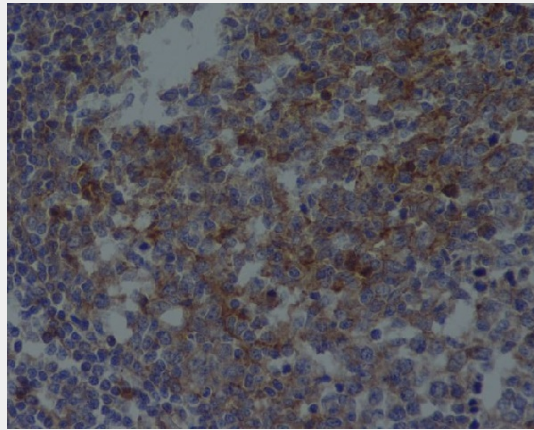
Immunohistochemical analysis of paraffin-embedded Human Hodgkin's lymphoma, using the Antibody at 1:400 dilution.



Immunohistochemical analysis of paraffin-embedded Human prostate cancer, using the Antibody at 1:2000 dilution.



Western blot analysis of CD81 expression in Ramos cell lysate.



Immunohistochemical analysis of paraffin-embedded human tonsil, using CD81 Antibody.