10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CD81 Antibody

Rabbit mAb
Catalog # AP90743

Product Information

Application	IHC, IF, FC, ICC, IHF
Primary Accession	P60033
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	26 kDa cell surface protein TAPA-1; CD81 antigen; CVID6 ; TAPA1; Tetraspanin 28; Tspan 28;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	25809

Additional Information

Dilution	WB 1:1000~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CD81
Description	The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility.Many research studies demonstrate a role for CD81 in lymphocyte signaling. CD81 is also a well-characterized receptor for Hepatitis C Virus and facilitates the entry of the virus into target cells.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

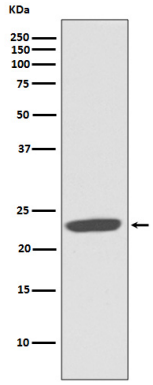
Cellular Location

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)

Images



Western blot analysis of CD81 expression in Ramos cell lysate.

Image not found : 202311/AP90743-IHC.jpg

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.