

CD81 (17W19) Rabbit Monoclonal Antibody CD81 (17W19) Rabbit Monoclonal Antibody Catalog # AP93672

Specification

CD81 (17W19) Rabbit Monoclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Clonality
Calculated MW

WB
P60033
Rat, Human, Mouse
Monoclonal
25809

CD81 (17W19) 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}

Dilution WB~~1:1000

Storage Conditions -20°C

CD81 (17W19) 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: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/a>, PubMed:20237408, PubMed:22307619, PubMed:23858057, 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 (17W19) Rabbit Monoclonal Antibody - 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 (17W19) Rabbit Monoclonal Antibody - Images





