

# CD316 Polyclonal Antibody

Catalog # AP73665

### **Product Information**

| Application       | WB            |
|-------------------|---------------|
| Primary Accession | <u>Q969P0</u> |
| Reactivity        | Human, Mouse  |
| Host              | Rabbit        |
| Clonality         | Polyclonal    |
| Calculated MW     | 65034         |

#### **Additional Information**

| Gene ID            | 93185  |
|--------------------|--|
| Other Names        | IGSF8; CD81P3; EWI2; KCT4; Immunoglobulin superfamily member 8; IgSF8;<br>CD81 partner 3; Glu-Trp-Ile EWI motif-containing protein 2; EWI-2;<br>Keratinocytes-associated transmembrane protein 4; KCT-4; LIR-D1;<br>Prostaglandin regulatory-like protein; PGRL; CD316 |
| Dilution           | WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.  |
| Format             | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.  |
| Storage Conditions | -20°C  |

#### **Protein Information**

| Name     | IGSF8   |
|----------|---|
| Synonyms | CD81P3, EWI2, KCT4  |
| Function | Member of the immunoglobulin superfamily (IgSF) that links<br>tetraspanin-enriched microdomains to the actin cytoskeleton and plays<br>several important roles in innate and adaptive immunity (PubMed: <u>11504738</u> ,<br>PubMed: <u>14662754</u> ). Acts as an inducible receptor of HSPA8 on dendritic cells<br>to enhance the CCL21/SLC-dependent migration of activated mature dendritic<br>cells while attenuating their antigen- specific stimulatory capacities<br>(PubMed: <u>17785435</u> ). In complex with alpha-actinins ACTN1 and ACTN4,<br>regulates actin dynamics in the immune synapse and subsequent T-cell<br>activation (PubMed: <u>22689882</u> ). Inhibits the entry of several viruses such as<br>hepatitis C Virus (HCV) or HIV-1. Mechanistically, promotes a change in CD81<br>organization at the plasma membrane by significantly restricting its diffusion<br>which in turn influences CD81 interaction with Claudin-1/CLDN1, preventing<br>CLDN1 from acting as a co-receptor required for HCV entry |

|                   | (PubMed: <u>23351194</u> ). Accumulates at the presynaptic terminal, the producer cell side of the virological synapse, to prevent HIV-1 Env-mediated cell-cell fusion (PubMed: <u>31757023</u> ). Highly expressed on malignant cells with antigen presentation defects, interacts with NK receptor KIR3DL2 to suppress NK-cell cytotoxicity (PubMed: <u>38657602</u> ). May participate in the regulation of neurite outgrowth and maintenance of the neural network in the adult brain. |
|-------------------|--|
| Cellular Location | Cell membrane; Single-pass membrane protein. Note=Colocalizes with CD81 at the immune synapse.   |
| Tissue Location   | Expressed in brain, kidney, testis, liver and placenta with moderate<br>expression in all other tissues. Detected on a majority of B-cells, T-cells, and<br>natural killer cells (PubMed:12708969). Expressed on dendritic cells<br>(PubMed:17785435)  |

## Background

May play a key role in diverse functions ascribed to CD81 and CD9 such as oocytes fertilization or hepatitis C virus function. May regulate proliferation and differentiation of keratinocytes. May be a negative regulator of cell motility: suppresses T-cell mobility coordinately with CD81, associates with CD82 to suppress prostate cancer cell migration, regulates epidermoid cell reaggregation and motility on laminin-5 with CD9 and CD81 as key linkers. May also play a role on integrin- dependent morphology and motility functions. May participate in the regulation of neurite outgrowth and maintenance of the neural network in the adult brain.

#### Images



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