

# CD316 Polyclonal Antibody

Catalog # AP73665

## Product Information

Application	WB, E
Primary Accession	<a href="#">Q969P0</a>
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; CD81 partner 3; Glu-Trp-Ile EWI motif-containing protein 2; EWI-2; Keratinocytes-associated transmembrane protein 4; KCT-4; LIR-D1; Prostaglandin regulatory-like protein; PGRL; CD316
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. E~~N/A
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 tetraspanin-enriched microdomains to the actin cytoskeleton and plays several important roles in innate and adaptive immunity (PubMed: <a href="#">11504738</a> , PubMed: <a href="#">14662754</a> ). Acts as an inducible receptor of HSPA8 on dendritic cells to enhance the CCL21/SLC-dependent migration of activated mature dendritic cells while attenuating their antigen- specific stimulatory capacities (PubMed: <a href="#">17785435</a> ). In complex with alpha-actinins ACTN1 and ACTN4, regulates actin dynamics in the immune synapse and subsequent T-cell activation (PubMed: <a href="#">22689882</a> ). Inhibits the entry of several viruses such as hepatitis C Virus (HCV) or HIV-1. Mechanistically, promotes a change in CD81 organization at the plasma membrane by significantly restricting its diffusion which in turn influences CD81 interaction with Claudin-1/CLDN1, preventing CLDN1 from acting as a co-receptor required for HCV entry

(PubMed:[23351194](#)). Accumulates at the presynaptic terminal, the producer cell side of the virological synapse, to prevent HIV-1 Env-mediated cell-cell fusion (PubMed:[31757023](#)). Highly expressed on malignant cells with antigen presentation defects, interacts with NK receptor KIR3DL2 to suppress NK-cell cytotoxicity (PubMed:[38657602](#)). 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.

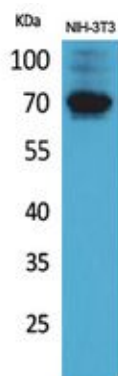
#### Tissue Location

Expressed in brain, kidney, testis, liver and placenta with moderate expression in all other tissues. Detected on a majority of B-cells, T-cells, and natural killer cells (PubMed:12708969). Expressed on dendritic cells (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



Western Blot analysis of NIH-3T3 cells using CD316 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

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