

CD316 / IGSF8 Antibody (Internal) Rabbit Polyclonal Antibody

Catalog # ALS11197

# Specification

# CD316 / IGSF8 Antibody (Internal) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution IHC-P <u>Q969P0</u> Human, Rabbit, Monkey, Pig, Bovine Rabbit Polyclonal 65kDa KDa IHC-P~~N/A

## CD316 / IGSF8 Antibody (Internal) - Additional Information

Gene ID 93185

Other Names

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, IGSF8, CD81P3, EWI2, KCT4

**Target/Specificity** Human IGSF8. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except SIAH2 (53%).

**Reconstitution & Storage** Long term: -70°C; Short term: +4°C

**Precautions** CD316 / IGSF8 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

# CD316 / IGSF8 Antibody (Internal) - 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="http://www.uniprot.org/citations/11504738" target="\_blank">11504738</a>, PubMed:<a href="http://www.uniprot.org/citations/14662754" target="\_blank">11504738</a>, PubMed:<a href="http://www.uniprot.org/citations/14662754" target="\_blank">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="http://www.uniprot.org/citations/17785435"



target="\_blank">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="http://www.uniprot.org/citations/22689882" target="\_blank">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:<a

href="http://www.uniprot.org/citations/23351194" target="\_blank">23351194</a>). Accumulates at the presynaptic terminal, the producer cell side of the virological synapse, to prevent HIV-1 Env-mediated cell-cell fusion (PubMed:<a href="http://www.uniprot.org/citations/31757023" target="\_blank">31757023</a>). Highly expressed on malignant cells with antigen presentation defects, interacts with NK receptor KIR3DL2 to suppress NK-cell cytotoxicity (PubMed:<a href="http://www.uniprot.org/citations/38657602" target="\_blank">38657602</a>). 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)

## CD316 / IGSF8 Antibody (Internal) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### CD316 / IGSF8 Antibody (Internal) - Images





## Anti-IGSF8 antibody ALS11197 IHC of human kidney.



Anti-IGSF8 antibody ALS11197 IHC of human brain, cortex.

# CD316 / IGSF8 Antibody (Internal) - 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.

## CD316 / IGSF8 Antibody (Internal) - References

Stipp C.S., et al.J. Biol. Chem. 276:40545-40554(2001). Charrin S., et al.Biochem. J. 373:409-421(2003). Bonkobara M., et al.Br. J. Dermatol. 148:654-664(2003). Zhang W., et al.Submitted (OCT-2000) to the EMBL/GenBank/DDBJ databases. Ota T., et al.Nat. Genet. 36:40-45(2004).