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IGSF8 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12389c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q969P0
Other Accession	NP_443100.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31348
Calculated MW	65034
Antigen Region	226-254

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	This IGSF8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 226-254 amino acids from the Central region of human IGSF8.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	IGSF8 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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:11504738, PubMed:14662754). 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:17785435). In complex with alpha-actinins ACTN1 and ACTN4, regulates actin dynamics in the immune synapse and subsequent T-cell activation (PubMed:22689882). 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

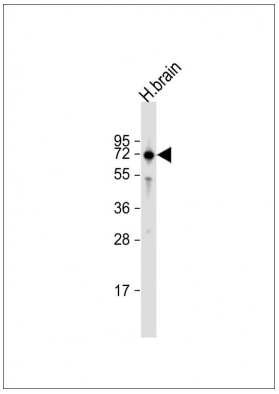
IGSF8 may play a key role in diverse functions ascribed to CD81 and CD9 such as oocytes fertilization or hepatitis C virus function. May regulate proliferation and differentiation of keratinocytes. May be a negative regulator of cell motility: suppresses T-cell mobility coordinately with CD81, associates 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.

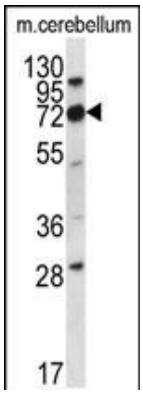
References

Kolesnikova, T.V., et al. Neoplasia 11(1):77-86(2009)
Rocha-Perugini, V., et al. PLoS ONE 3 (4), E1866 (2008) :
Kettner, S., et al. Mol. Cell. Biol. 27(21):7718-7726(2007)
Sala-Valdes, M., et al. J. Biol. Chem. 281(28):19665-19675(2006)
Yang, X.H., et al. J. Biol. Chem. 281(18):12976-12985(2006)

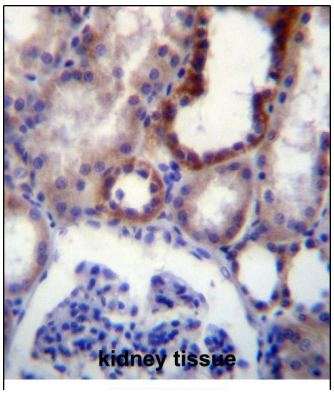
Images

Anti-IGSF8 Antibody (Center) at 1:1000 dilution + human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 65 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





IGSF8 Antibody (Center) (Cat. #AP12389c) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the IGSF8 antibody detected the IGSF8 protein (arrow).



IGSF8 Antibody (Center) (Cat. #AP12389c)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of IGSF8 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

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