

Rabbit Anti-MUPP1 antibody

SL12099R

Product Name:	MUPP1
Chinese Name:	紧密连接蛋白MUPP1抗体
Alias:	MPDZ; Multi PDZ domain protein 1; Multi-PDZ domain protein 1; multiple PDZ domain protein; MPDZ HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	221kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MUPP1/MPDZ:388-480/2070
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	MPDZ is a 2,042 amino acid peripheral membrane protein that colocalizes with SR-2C on the apical membrane of epithelial choroid plexus cells. Expressed in heart, brain, placenta, liver, skeletal muscle, kidney and pancreas, MPDZ causes clustering of SR-2C, a serotonin receptor, at the cell surface. MPDZ is member of the NMDAR signaling complex that is involved in regulating AMPAR potentiation and synaptic plasticity in excitatory synapses. As a tight junction protein in epithelial cells, MPDZ interacts with

SSTR3, a G-protein-coupled receptor, to regulate transepithelial permeability in a pertussis toxin sensitive manner. MPDZ, along with Kir4.2, may form a complex with other proteins in the nephron and regulate ion transport. MPDZ contains one L27 domain and thirteen PDZ domains.

Function:

MUPP1 was first identified as a protein interacting with type 2C serotonin receptor. It acts as a scaffolding protein at tight junctions where it has been reported to interact with integral proteins, anchoring them to the F-actin cytoskeleten. It is also thought to be important in the osmotic stress response in kidney cells and has been shown to play a role in promoting G protein coupling to receptors.

Subunit:

Interacts with CLDN5, DLG4, GRIN1, F11R/JAM, CLDN1, NG2, CRB1, MPP4 and MPP5 (By similarity). Interacts with HTR2A, HTR2B, HTR2C, PLEKHA1/TAPP1, PLEKHA2/TAPP2, CXADR, SYNGAP1, CAMK2A and CAMK2B. Interacts with the adenovirus type 9 E4-ORF1 protein.

Subcellular Location:

Cell membrane; Peripheral membrane protein; Cytoplasmic side. Apical cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell projection, dendrite. Cell junction, tight junction. Cell junction, synapse. Cell junction, synapse, synaptosome. Note=Associated with membranes. Colocalizes with HTR2C on the apical membrane of epithelial choroid plexus cells. Highly enriched in postsynaptic densities (PSD). Localized to punctae on dendrites of hippocampal neurons and colocalizes with the synaptic marker DLG4. Localized mainly in the Schmidt-Lanterman incisures of myelinating Schwann cells (By similarity). In the retina, localizes to the sub-apical region adjacent to the adherens junction complex at the outer limiting membrane. Enriched at the tight junctions of epithelial cells. Association to the tight junctions depends on CXADR.

Tissue Specificity:

Expressed in heart, brain, placenta, liver, skeletal muscle, kidney and pancreas.

Similarity:

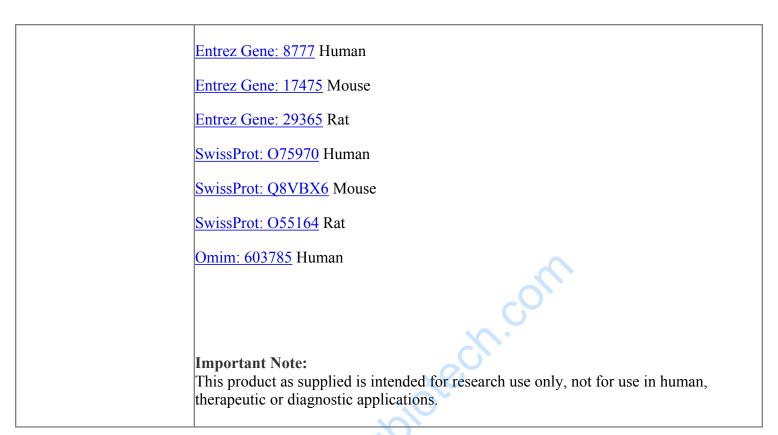
Contains 1 L27 domain. Contains 13 PDZ (DHR) domains.

SWISS:

075970

Gene ID: 8777

Database links:



MMM. SUMOROS