FRMPD4 Antibody

Catalog No: #24994

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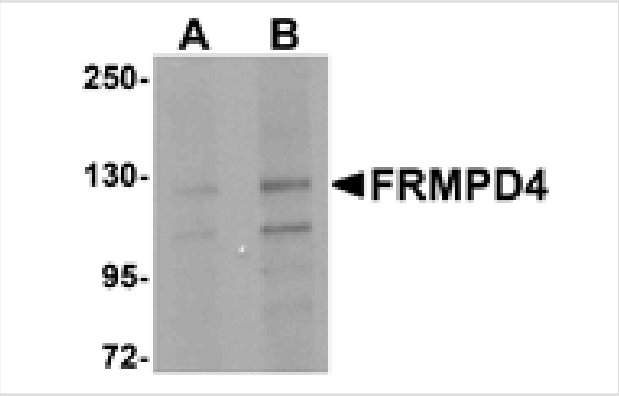
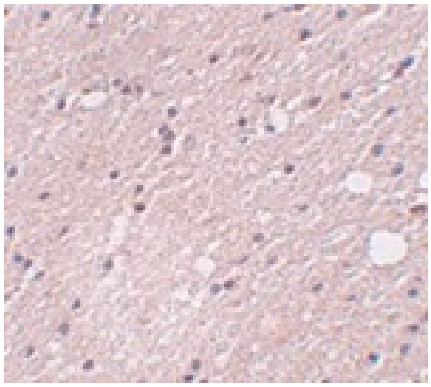
Description

Product Name	FRMPD4 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA,WB,IHC-P,IF
Species Reactivity	Hu
Immunogen Type	Peptide
Immunogen Description	Raised against an 18 amino acid peptide from near the center of human FRMPD4.
Target Name	FRMPD4
Other Names	FERM and PDZ domain-containing 4, Preso, PDZD10, PDZK10
Accession No.	Accession No. Swiss-Prot:Q14CM0 Gene ID:9758 Uniprot:Q14CM0
Uniprot	Q12767
GeneID	9772;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

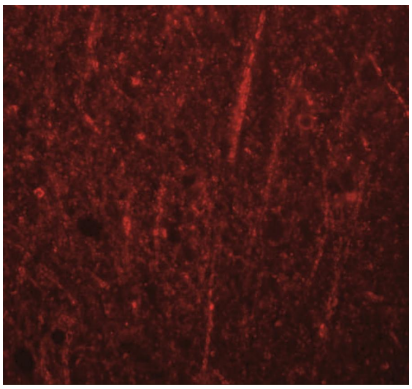
Images



Western blot analysis of FRMPD4 in SK-N-SH cell lysate with FRMPD4 antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of FRMPD4 in human brain tissue with FRMPD4 antibody at 5 ug/mL.



Immunofluorescence of FRMPD4 in human brain tissue with FRMPD4 antibody at 20 ug/mL.

Background

The FERM and PDZ domain containing (FRMPD) protein family consists of four proteins that contain a FERM (Four-point-one, erzin, radixin, moesin) domain and at least one PDZ (PSD-95/Discs large/Zonula-occuldens-1) domain. FRMPD4, also known as Preso, also contains another protein interaction domain termed WW (domain with two conserved Trp residues) at its amino terminus. It was identified through a yeast two-hybrid screen using the PDZ domain of PSD-95 as bait and is highly expressed in multiple regions of the brain and is enriched in the postsynaptic density (PSD) fractions. Overexpression of FRMPD4 in cultured hippocampal neurons significantly increased the linear density of dendritic spines without changing their length and width; conversely, knockdown experiments using RNAi caused a decrease in spine density, indicating FRMPD4 positively regulates dendritic spine density but not morphology. The decreased level of FRMPD4 also resulted in reduced levels of excitatory synaptic transmission, suggesting that FRMPD4 is required for maintenance of excitatory synaptic transmission.

Note: This product is for in vitro research use only