

LRFN2 Antibody

Catalog # ASC10863

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9ULH4
Other Accession	Q9ULH4 , 62286951
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	84731
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	LRFN2 antibody can be used for detection of LRFN2 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	57497
Other Names	Leucine-rich repeat and fibronectin type-III domain-containing protein 2, Synaptic adhesion-like molecule 1, LRFN2, KIAA1246, SALM1
Target/Specificity	LRFN2; At least two isoforms of LRFN2 are known to exist. This antibody is predicted to not cross-react with other members of the LRFN family.
Reconstitution & Storage	LRFN2 antibody can be 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.
Precautions	LRFN2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LRFN2
Synonyms	KIAA1246, SALM1
Function	Promotes neurite outgrowth in hippocampal neurons. Enhances the cell surface expression of 2 NMDA receptor subunits GRIN1 and GRIN2A. May play a role in redistributing DLG4 to the cell periphery (By similarity).
Cellular Location	Membrane; Single-pass type I membrane protein. Synapse. Postsynaptic cell membrane

Background

LRFN2 Antibody: LRFN2 is one of a family of five transmembrane glycoproteins that are highly expressed in neuronal tissues. LRFN proteins share leucine-rich repeat (LRR)-immunoglobulin-like (Ig)-fibronectin type III (Fn)-transmembrane domain structure with other members of the LRR-Ig-Fn protein superfamily such as the Slitrk family of proteins. Expression of LRFN1, -3, and -4 mRNA was detected in embryonic neuronal cells, while Lrfn2 and Lrfn5 expression was primarily restricted to more mature cells. LRFN1, -2, and -4 bound to PDZ domains of postsynaptic PSD95, re-distributing PSD95 to the cell periphery. It has been suggested that the Lrfn proteins play a role in the developing and/or mature vertebrate nervous system.

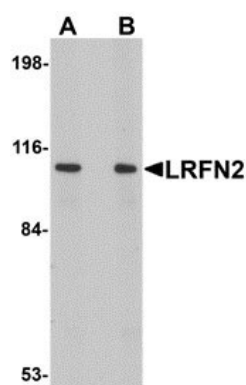
References

Morimura N, Inoue T, Katayama K, et al. Comparative analysis of structure, expression and PSD95-binding capacity of Lrfn, a novel family of neuronal transmembrane proteins. *Gene*2006; 380:72-83.

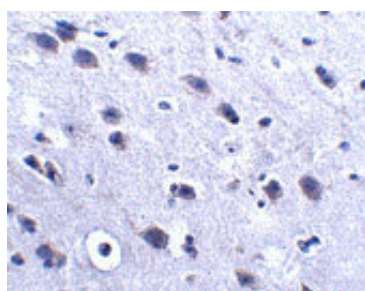
Kobe B and Kajava AV. The leucine-rich repeat as a protein recognition motif. *Curr. Opin. Struct. Biol.*2001; 11:725-32.

Aruga J and Mikoshiba K. Identification and characterization of Slitrk, a novel transmembrane protein family controlling neurite outgrowth. *Mol. Cell Neurosci.*2003; 24:117-29.

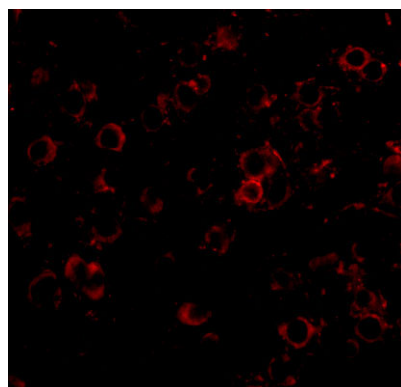
Images



Western blot analysis of LRFN2 in rat brain lysate with LRFN2 antibody at (A) 1 and (B) 2 $\mu\text{g/mL}$.



Immunohistochemistry of LRFN2 in mouse brain tissue with LRFN2 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of LRFN2 in mouse brain tissue with LRFN2 antibody at 20 $\mu\text{g/mL}$.

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