

LRFN1 Antibody

Catalog # ASC10862

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9P244
Other Accession	Q9P244 , 189028858
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	82318
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	LRFN1 antibody can be used for detection of LRFN1 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	57622
Other Names	Leucine-rich repeat and fibronectin type III domain-containing protein 1, Synaptic adhesion-like molecule 2, LRFN1, KIAA1484, SALM2
Target/Specificity	LRFN1; This antibody is predicted to not cross-react with other members of the LRFN family.
Reconstitution & Storage	LRFN1 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	LRFN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LRFN1
Synonyms	KIAA1484, SALM2
Function	Promotes neurite outgrowth in hippocampal neurons. Involved in the regulation and maintenance of excitatory synapses. Induces the clustering of excitatory postsynaptic proteins, including DLG4, DLGAP1, GRIA1 and GRIN1 (By similarity).
Cellular Location	Membrane; Single-pass type I membrane protein. Synapse. Postsynaptic

density membrane. Note=Detected in excitatory, but not inhibitory, synaptic plasma membrane.

Background

LRFN1 Antibody: LRFN1 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. At least two isoforms of LRFN1 are known to exist.

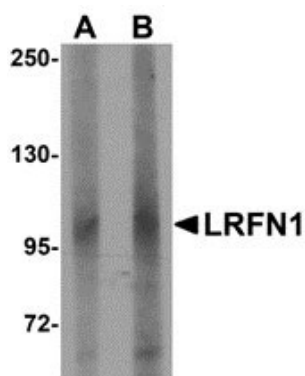
References

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.

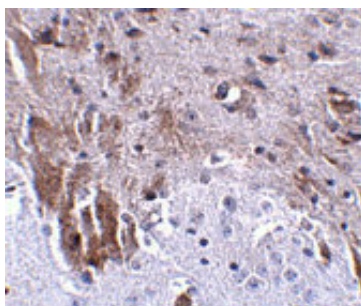
Kobe B and Kajava AV. The leucine-rich repeat as a protein recognition motif. *Curr. Opin. Struct. Biol.*2001; 11:725-32.

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

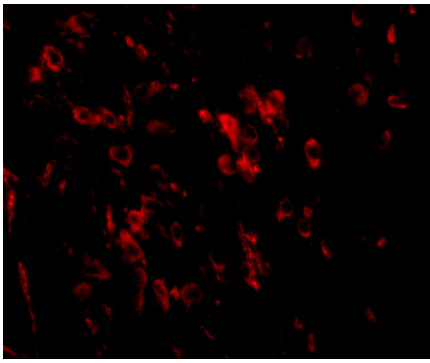


Western blot analysis of LRFN1 in human brain lysate with LRFN1 antibody at (A) 1 and (B) 2 μ g/mL.



Immunohistochemistry of LRFN1 in mouse brain tissue with LRFN1 antibody at 2.5 μ g/mL.

Immunofluorescence of LRFN1 in mouse brain tissue with LRFN1 antibody at 20 μ g/mL.



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