

LRFN1 Antibody

Catalog # ASC10862

Specification

LRFN1 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality

Application Notes

Isotype

WB, IHC-P, IF, E

O9P244

<u>09P244</u>, <u>189028858</u> Human, Mouse, Rat

Rabbit Polyclonal

IqG

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 µg/mL. For immunofluorescence start at 20

μg/mL.

LRFN1 Antibody - Additional Information

Gene ID 57622

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.

LRFN1 Antibody - 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.

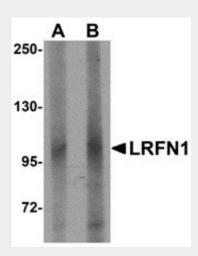


LRFN1 Antibody - Protocols

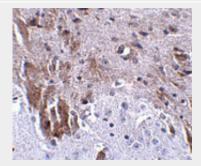
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LRFN1 Antibody - Images

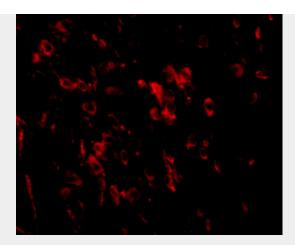


Western blot analysis of LRFN1 in human brain lysate with LRFN1 antibody at (A) 1 and (B) 2 $\mu \text{g/mL}.$



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





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

LRFN1 Antibody - 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 (lg)-fibronectin type III (Fn)-transmembrane domain structure with other members of the LRR-lg-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.

LRFN1 Antibody - 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. Gene2006; 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.