



Rabbit Anti-LRFN1 antibody

SL12141R

Product Name LRFN1**Chinese Name** 神经突触粘附样分子 1 抗体**Alias** Leucine rich repeat and fibronectin type III domain containing 1; Leucine rich repeat and fibronectin type III domain containing protein 1; Leucine-rich repeat and fibronectin type III domain-containing protein 1; LRFN 1; lrfn1; LRFN1_HUMAN; SALM 2; SALM2; Synaptic adhesion like molecule 2; Synaptic adhesion-like molecule 2.**Research Area** Neurobiology Signal transduction Cell adhesion molecule**Immunogen Species** Rabbit**Clonality** Polyclonal**React Species** (predicted: Human, Mouse, Rat, Dog, Pig, Cow, Sheep,)
IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000**Applications** (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.**Theoretical molecular weight** 79kDa**Cellular localization** cytoplasmic The cell membrane**Form** Liquid**Concentration** 1mg/ml**immunogen** KLH conjugated synthetic peptide derived from human LRFN1: 181-290/771 <Extracellular>**Lsotype** IgG**Purification** affinity purified by Protein A**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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LRFN1 is a 771 amino acid single-pass type I membrane protein that belongs to the LRFN family. Containing a fibronectin type-III domain, an Ig-like (immunoglobulin-like) domain, a LRRCT domain, a LRRNT domain and seven LRR (leucine-rich) repeats, LRFN1 is thought to promote neurite outgrowth in hippocampal neurons and is involved in the regulation and maintenance of excitatory synapses. LRFN1 forms heteromeric complexes with LRFN2, LRFN3, LRFN4 and LRFN5, but does not have the ability to form homomeric complexes across cell junctions of adjacent cells like other LRFN family members. The PDZ-binding motif of LRFN1 is required for neurite outgrowth promotion and for SAP 97-, NE-dlg- and PSD-95-binding. LRFN1 is encoded by a gene located on human chromosome 19q13.2 and mouse chromosome 7 A3.

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.

Subunit:

Can form heteromeric complexes with LRFN2, LRFN3, LRFN4 and LRFN5 (By similarity). Forms homomeric complexes, but not across cell junctions (By similarity). Interacts with DLG1, DLG2, DLG3 and DLG4. Interacts with 2 AMPA receptor subunits GRIA1 and GRIA2 and NMDA receptor subunit GRIN1 (By similarity).

Product Detail

Subcellular Location:

Membrane; Single-pass type I membrane protein (By similarity). Cell junction, synapse (By similarity). Cell junction, synapse, postsynaptic cell membrane, postsynaptic density (By similarity). Note=Detected in excitatory, but not inhibitory, synaptic plasma membrane (By similarity).

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.
Glycosylated.

Similarity:

Belongs to the LRFN family.
Contains 1 fibronectin type-III domain.
Contains 1 Ig-like (immunoglobulin-like) domain.
Contains 7 LRR (leucine-rich) repeats.
Contains 1 LRRCT domain.
Contains 1 LRRNT domain.

SWISS:

Q9P244

Gene ID:
57622

Database links:

[Entrez Gene: 57622](#) Human

[Entrez Gene: 80749](#) Mouse

[Entrez Gene: 365222](#) Rat

[Omir: 612807](#) Human

[SwissProt: Q9P244](#) Human

[SwissProt: Q2WF71](#) Mouse

[SwissProt: P0C7J6](#) Rat

[Unigene: 97860](#) Human

[Unigene: 483073](#) Mouse

[Unigene: 234182](#) Rat