

Rabbit Anti-LRFN1/FITC Conjugated antibody

SL12141R-FITC

Product Name:	Anti-LRFN1/FITC
Chinese Name:	FITC标记的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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Sheep,
Applications:	ICC=1:50-200IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	79kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human LRFN1
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail:	background: 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, LFRN4 and LFRN5, 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).

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.

Database links:

Entrez Gene: 57622Human

Entrez Gene: 80749Mouse

Entrez Gene: 365222Rat

<u>Omim: 612807</u>Human

SwissProt: Q9P244Human
SwissProt: Q2WF71Mouse
SwissProt: P0C7J6Rat
Unigene: 97860Human
Unigene: 483073Mouse
Unigene: 234182Rat
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