SANTA CRUZ BIOTECHNOLOGY, INC.

LRFN4 (P-12): sc-138392

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The Power to Question

BACKGROUND

LRFN4 (leucine rich repeat and fibronectin type III domain containing 4), also known as SALM3 or FIGLER6, is a 635 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, LRFN4 is thought to promote neurite outgrowth in hippocampal neurons and may play a role in redistributing PSD-95 to the cell periphery. LRFN4 forms heteromeric complexes with LRFN1, LRFN2, LFRN3 and LFRN5, but does not have the ability to form homomeric complexes across cell junctions of adjacent cells like some other LRFN family members. The PDZ-binding motif of LRFN4 is required for neurite outgrowth promotion and for SAP 97-, NE-dlg- and PSD-95-binding. LRFN4 is encoded by a gene located on human chromosome 11q13.1 and mouse chromosome 19 A.

REFERENCES

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3. Ko, J., Kim, S., Chung, H.S., Kim, K., Han, K., Kim, H., Jun, H., Kaang, B.K. and Kim, E. 2006. SALM synaptic cell adhesion-like molecules regulate the differentiation of excitatory synapses. Neuron 50: 233-245.
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6. Seabold, G.K., Wang, P.Y., Chang, K., Wang, C.Y., Wang, Y.X., Petralia, R.S. and Wenthold, R.J. 2008. The SALM family of adhesion-like molecules forms heteromeric and homomeric complexes. J. Biol. Chem. 283: 8395-8405.
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CHROMOSOMAL LOCATION

Genetic locus: LRFN4 (human) mapping to 11q13.1; Lrfn4 (mouse) mapping to 19 A.

SOURCE

LRFN4 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of LRFN4 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138392 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRFN4 (P-12) is recommended for detection of LRFN4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other LRFN family members.

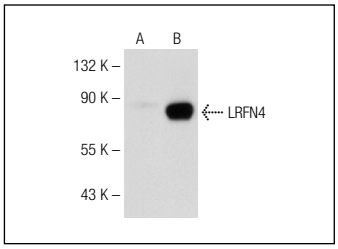
LRFN4 (P-12) is also recommended for detection of LRFN4 in additional species, including canine and bovine.

Suitable for use as control antibody for LRFN4 siRNA (h): sc-96803, LRFN4 siRNA (m): sc-149036, LRFN4 shRNA Plasmid (h): sc-96803-SH, LRFN4 shRNA Plasmid (m): sc-149036-SH, LRFN4 shRNA (h) Lentiviral Particles: sc-96803-V and LRFN4 shRNA (m) Lentiviral Particles: sc-149036-V.

Molecular Weight of LRFN4: 67 kDa.

Positive Controls: LRFN4 (m): 293T Lysate: sc-121393.

DATA



LRFN4 (P-12): sc-138392. Western blot analysis of LRFN4 expression in non-transfected: sc-117752 (**A**) and mouse LRFN4 transfected: sc-121393 (**B**) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.