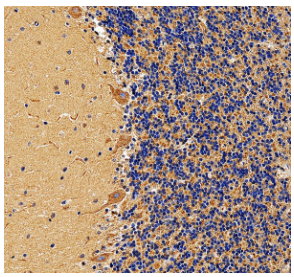
LRP11 Antibody / LDL Receptor Related Protein 11 Antibody (FY13514)

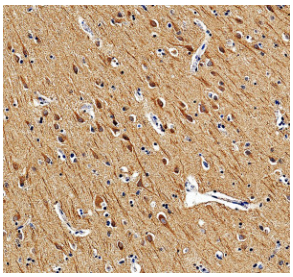
Catalog No.	Formulation	Size
FY13514	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

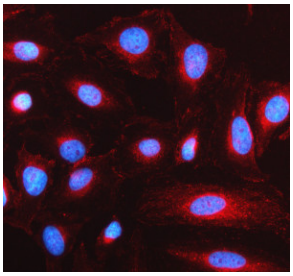
Species Reactivity	Human
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen Affinity
Buffer	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4
UniProt	Q86VZ4
Applications	Western Blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml ELISA: 0.1-0.5ug/ml Immunofluorescence: 5ug/ml
Limitations	This LRP11 Antibody / LDL Receptor Related Protein 11 Antibody is available for research use only.



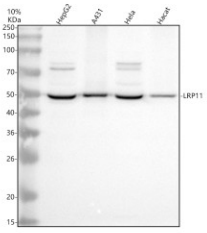
LRP11 Antibody by IHC in Human Cerebellum Tissue. Immunohistochemistry staining of FFPE human cerebellum tissue using rabbit polyclonal LRP11 antibody at 2 ug/ml. Antigen retrieval was performed using EDTA buffer at pH 8.0, followed by blocking with 10% goat serum and overnight primary antibody incubation at 4oC. Detection was performed using peroxidase-conjugated goat anti-rabbit IgG and DAB. Brown LDL Receptor Related Protein 11 immunoreactivity is prominent within the cerebellar molecular layer and in large Purkinje neurons at the boundary with the granular layer. The densely packed cells of the granular layer exhibit comparatively weaker staining, highlighting regional differences in LRP11 immunoreactivity.



LRP11 Antibody by IHC in Human Brain Tissue. Immunohistochemistry staining of FFPE human brain tissue using rabbit polyclonal LRP11 antibody at 2 ug/ml. Heat-induced epitope retrieval was performed using EDTA buffer at pH 8.0. Tissue sections were blocked with 10% goat serum and incubated with primary antibody overnight at 4oC, followed by peroxidase-conjugated goat anti-rabbit IgG and DAB chromogenic detection. Brown immunoreactivity is distributed throughout the neuropil, with prominent staining of neuronal cell bodies and their processes. The predominantly cytoplasmic and process-associated staining pattern demonstrates the distribution of LDL Receptor Related Protein 11 immunoreactivity in human brain tissue.



LRP11 Antibody by IF in Human HeLa Cells. Immunofluorescence staining of human HeLa cells using rabbit polyclonal LRP11 antibody. LDL Receptor Related Protein 11 immunoreactivity is visualized in red, while nuclei are counterstained blue with DAPI. Red fluorescence is distributed predominantly throughout the cytoplasm, with a fine punctate and reticular appearance and areas of increased perinuclear staining. The nuclear regions show comparatively little red fluorescence. This staining pattern demonstrates intracellular LRP11 immunoreactivity in cultured human HeLa cells.



LRP11 Antibody by WB in Human HepG2, A431, HeLa and HaCaT Cells. Western blot analysis of human whole-cell lysates using rabbit polyclonal LRP11 antibody at 0.5 ug/ml. Lane 1: HepG2 cells; lane 2: A431 cells; lane 3: HeLa cells; lane 4: HaCaT cells. Samples containing 30 ug of protein per lane were separated by 10% SDS-PAGE under reducing conditions and transferred to a nitrocellulose membrane. Following overnight primary antibody incubation at 4oC, detection was performed using HRP-conjugated goat anti-rabbit IgG and chemiluminescence. A prominent band is detected at approximately 50 kDa in all four lysates, consistent with the calculated molecular weight of 53.3 kDa for LDL Receptor Related Protein 11. Additional weaker bands are visible above the principal band in some lanes.

Description

LRP11 Antibody recognizes LDL Receptor Related Protein 11, a relatively poorly characterized protein belonging to the low-density lipoprotein receptor-related protein family. LRP11 is also associated with the alternative designation MANSC3, referring to MANSC domain-containing protein 3. Members of the LDL receptor-related protein family participate in diverse cellular processes, including ligand recognition, membrane-associated signaling, and protein trafficking. However, the specific physiological functions of LRP11 remain incompletely understood, and its classification within this protein family does not establish a direct role in lipoprotein uptake.

LRP11 is a predicted membrane-associated protein containing structural features associated with extracellular protein interactions. Its sequence includes an LDL receptor class A domain, a protein module found in receptors that interact with extracellular ligands. Such domains frequently contain conserved cysteine residues and calcium-binding motifs that contribute to structural stability. The presence of this domain suggests that LDL Receptor Related Protein 11 may participate in molecular recognition at or near cellular membranes, although its endogenous binding partners and ligand specificity have not been conclusively established.

Computational annotations predict localization of LRP11 to the plasma membrane. These predictions provide a starting point for investigating its subcellular distribution, but additional experimental evidence is needed to determine whether the protein resides predominantly at the cell surface, within intracellular membrane compartments, or in multiple cellular locations. Studies examining LRP11 expression and localization may help clarify its contribution to membrane-associated cellular processes.

Functional annotations have also associated LRP11 with phosphoprotein binding and predicted responses to

environmental stresses, including changes in temperature and water availability. These proposed activities should be distinguished from experimentally demonstrated biological functions. In particular, the molecular pathways connecting LRP11 to cellular stress responses have not been sufficiently characterized to establish a definitive regulatory mechanism.

Investigation of LRP11 may contribute to a broader understanding of poorly characterized LDL receptor-related proteins and their roles in cellular organization. Its expression in human tissues and cultured cells provides opportunities to examine tissue distribution, apparent molecular weight, and intracellular localization. Western blotting can help assess protein expression, while immunohistochemistry and immunofluorescence offer complementary approaches for studying cellular and tissue-associated staining patterns.

An LRP11 Antibody from NSJ Bioreagents supports research investigating LDL Receptor Related Protein 11 expression, subcellular distribution, and the potential biological functions of this incompletely characterized protein.

For antibodies targeting additional membrane-associated proteins and regulators of cellular organization, explore our Cell Biology Antibodies collection.

Application Notes

Optimal dilution of the LRP11 Antibody / LDL Receptor Related Protein 11 Antibody should be determined by the researcher.

Immunogen

Amino acids EEFRRQLQQERPQEELELE were used as the immunogen for the LRP11 Antibody.

Storage

After reconstitution, the LRP11 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

LDL Receptor Related Protein 11 antibody, Low Density Lipoprotein Receptor Related Protein 11 antibody, Low-Density Lipoprotein Receptor-Related Protein 11 antibody, LRP-11 antibody, MANSC3 antibody, MANSC Domain Containing 3 antibody

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