

RTN4RL2 Antibody

Catalog # ASC11586

Specification

RTN4RL2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype

Calculated MW **Application Notes** **WB 086UN3**

NP 848665, 30425563

Human Rabbit **Polyclonal**

laG

Predicted: 46 kDa KDa

RTN4RL2 antibody can be used for

detection of RTN4RL2 by Western blot at 1

- 2 μg/mL.

RTN4RL2 Antibody - Additional Information

Gene ID 349667

Target/Specificity

RTN4RL2; Three alternatively spliced transcript variants have been observed. RTN4RL2 antibody is predicted to not cross-react with other Nogo receptor-like proteins.

Reconstitution & Storage

RTN4RL2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

RTN4RL2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RTN4RL2 Antibody - Protein Information

Name RTN4RL2 (HGNC:23053)

Function

Cell surface receptor that plays a functionally redundant role in the inhibition of neurite outgrowth mediated by MAG (By similarity). Plays a functionally redundant role in postnatal brain development. Contributes to normal axon migration across the brain midline and normal formation of the corpus callosum. Does not seem to play a significant role in regulating axon regeneration in the adult central nervous system. Protects motoneurons against apoptosis; protection against apoptosis is probably mediated by MAG (By similarity). Like other family members, plays a role in restricting the number dendritic spines and the number of synapses that are formed during brain development (PubMed: 22325200). Signaling mediates activation of Rho and downstream

reorganization of the actin cytoskeleton (PubMed:22325200).

Cellular Location



Cell membrane; Lipid-anchor, GPI-anchor. Membrane raft. Cell projection, dendrite {ECO:0000250|UniProtKB:Q7M6Z0}. Perikaryon {ECO:0000250|UniProtKB:Q80WD1}. Cell projection, axon {ECO:0000250|UniProtKB:Q80WD1}. Note=Localized to the surface of neurons, including axons. Detected close to synapses, but is excluded from synapses. {ECO:0000250|UniProtKB:Q7M6Z0}

Tissue Location

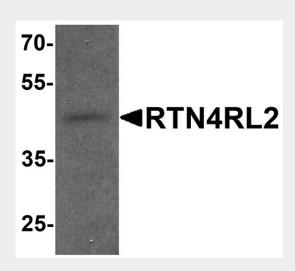
Highly expressed in brain and liver. Expressed at lower levels in kidney, mammary gland, placenta, skeletal muscle, spleen and thyroid.

RTN4RL2 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

RTN4RL2 Antibody - Images



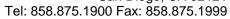
Western blot analysis of RTN4RL2 in rat brain tissue lysate with RTN4RL2 antibody at 1 µg/mL.

RTN4RL2 Antibody - Background

RTN4RL2 Antibody: Reticulon 4 receptor-like 2 (RTN4RL2), also known as NgR2and NgRH1, is a 60 kDa glycosylphosphatidylinositol-anchored protein that is expressed primarily in the brain. It contains eight leucine-rich repeats that are flanked by cysteine-rich sequences at both the N- and C-termini. The membrane anchored RTN4RL2 can be solubilized through the action of phospholipase or an unidentified MTMMP to generate a 46 kDa soluble receptor. It has been suggested that RTN4RL2 may play a role in regulating axonal regeneration and plasticity in the adult central nervous system.

RTN4RL2 Antibody - References







Pignot V, Hein AE, Barske C, et al. Characterization of two novel proteins, NgRH1 and NgRH2, structurally and biochemically homologous to the Nogo-66 receptor. J. Neurochem. 2003; 85:717-28.

Venkatesh K, Chivatakam O, Lee H, et al. The Nogo-66 receptor homolog NgR2 is a sialic acid-dependent receptor selective for myelin-associated glycoprotein. J. Neurosci. 2005; 25:808-22.