10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-RTN4R Antibody

Catalog # AP53742

Product Information

Application	WB
Primary Accession	Q9BZR6
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50708

Additional Information

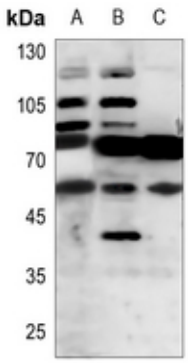
Gene ID	65078
Other Names	NOGOR; Reticulon-4 receptor; Nogo receptor; NgR; Nogo-66 receptor
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RTN4R. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	RTN4R
Synonyms	NOGOR
Function	Receptor for RTN4, OMG and MAG (PubMed: 12037567, PubMed:12068310, PubMed:12089450, PubMed:12426574, PubMed:12839991, PubMed:16712417, PubMed:18411262, PubMed:19052207). Functions as a receptor for the sialylated gangliosides GT1b and GM1 (PubMed:18411262). Besides, functions as a receptor for chondroitin sulfate proteoglycans (By similarity). Can also bind heparin (By similarity). Intracellular signaling cascades are triggered via the coreceptor NGFR (PubMed:12426574). Signaling mediates activation of Rho and downstream reorganization of the actin cytoskeleton (PubMed:16712417, PubMed:22325200). Mediates axonal growth inhibition (PubMed:12839991, PubMed:19052207, PubMed:28892071). Plays a role in regulating axon regeneration and neuronal plasticity in the adult central nervous system. Plays a role in postnatal brain development. Required for normal axon migration across the brain midline and normal formation of the corpus callosum. Protects motoneurons against

	apoptosis; protection against apoptosis is probably mediated via interaction with MAG. Acts in conjunction with RTN4 and LINGO1 in regulating neuronal precursor cell motility during cortical development. 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).
Cellular Location	Cell membrane; Lipid- anchor, GPI-anchor. Membrane raft. Cell projection, dendrite {ECO:0000250|UniProtKB:Q99PI8}. Cell projection, axon {ECO:0000250|UniProtKB:Q99PI8}. Perikaryon {ECO:0000250|UniProtKB:Q99M75}. Note=Detected along dendrites and axons, close to synapses, but clearly excluded from synapses {ECO:0000250|UniProtKB:Q99PI8}
Tissue Location	Widespread in the brain but highest levels in the gray matter. Low levels in heart and kidney; not expressed in oligodendrocytes (white matter).

Images



Western blot analysis of RTN4R expression in mouse brain (A), rat brain (B), rat spleen (C) whole cell lysates. (Predicted band size: 50 kD; Observed band size: 44-100 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.