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# Anti-RTN4R Antibody

Catalog # AP51939

## Product Information

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

## Additional Information

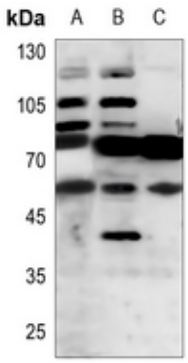
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| **Gene ID** | 65078 |
| **Other Names** | NOGOR; Reticulon-4 receptor; Nogo receptor; NgR; Nogo-66 receptor |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RTN4R. The exact sequence is proprietary. |
| **Dilution** | WB~~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

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| **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 |

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| | 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'.