

RTN4RL1/NgR3 Protein, Human (395a.a, HEK293, His)

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| Cat. No.: | HY-P71159 |
| Synonyms: | Reticulon-4 Receptor-Like 1; Nogo Receptor-Like 2; Nogo-66 Receptor Homolog 2; Nogo-66 Receptor-Related Protein 3; NgR3; RTN4RL1; NGRH2; NGRL2 |
| Species: | Human |
| Source: | HEK293 |
| Accession: | Q86UN2 (C25-A419) |
| Gene ID: | 146760 |
| Molecular Weight: | Approximately 63.0 kDa |

PROPERTIES

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| AA Sequence | <pre> C P R D C V C Y P A P M T V S C Q A H N F A A I P E G I P V D S E R V F L Q N N R I G L L Q P G H F S P A M V T L W I Y S N N I T Y I H P S T F E G F V H L E E L D L G D N R Q L R T L A P E T F Q G L V K L H A L Y L Y K C G L S A L P A G V F G G L H S L Q Y L Y L Q D N H I E Y L Q D D I F V D L V N L S H L F L H G N K L W S L G P G T F R G L V N L D R L L L H E N Q L Q W V H H K A F H D L R R L T T L F L F N N S L S E L Q G E C L A P L G A L E F L R L N G N P W D C G C R A R S L W E W L Q R F R G S S S A V P C V S P G L R H G Q D L K L L R A E D F R N C T G P A S P H Q I K S H T L T T T D R A A R K E H H S P H G P T R S K G H P H G P R P G H R K P G K N C T N P R N R N Q I S K A G A G K Q A P E L P D Y A P D Y Q H K F S F D I M P T A R P K R K G K C A R R T P I R A P S G V Q Q A </pre> |
| Appearance | Lyophilized powder. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4. |
| Endotoxin Level | <1 EU/µg, determined by LAL method. |
| Reconstitution | It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose). |
| Storage & Stability | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage. |
| Shipping | Room temperature in continental US; may vary elsewhere. |

DESCRIPTION

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| Background | RTN4RL1/NgR3, a cell surface receptor, assumes a functionally redundant role in postnatal brain development, exerting regulatory control over axon regeneration in the adult central nervous system. Its contributions encompass guiding axon |
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migration across the brain midline and facilitating the formation of the corpus callosum. Additionally, RTN4RL1 serves a protective function against motoneuronal apoptosis, potentially mediated by MAG. Notably, it plays a crucial role in inhibiting neurite outgrowth and axon regeneration through its interaction with neuronal chondroitin sulfate proteoglycans. The receptor's binding affinity extends to heparin. As observed in its family counterparts, RTN4RL1 participates in shaping dendritic spines and synapse numbers during brain development. Its signaling capability triggers the activation of Rho, culminating in downstream actin cytoskeleton reorganization. RTN4RL1 engages in a complex with RTN4R and NGFR, dependent on the presence of chondroitin sulfate proteoglycans, while displaying no interaction with MAG, OMG, and RTN4.

Caution: Product has not been fully validated for medical applications. For research use only.

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