Neuritin Protein, Human (N-His)

Cat. No.:	HY-P71908A
Synonyms:	Neuritin 1; Neuritin; NRN; Nrn1; NRN1_HUMAN; OTTHUMP00000015989; RP3 380B8.2 protein
Species:	Human
Source:	E. coli
Accession:	Q9NPD7 (A28-N115)
Gene ID:	51299
Molecular Weight:	Approximately 11 kDa

PROPERTIES

AA Sequence	A G K C D A V F K G F S D C L L K L G D S M A N Y P Q G L D D K T N I K T V C T Y W E D F H S C T V T A L T D C Q E G A K D M W D K L R K E S K N L N I Q G S L F E L C G S G N
Biological Activity	Measured in a cell proliferation assay using rat C6 cells. The ED_{50} this effect is 17.37 ng/ml, corresponding to a specific activity is 5.76×10^4 units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 50 mM Tris-HCL, 300 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. 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

Background	Neuritin, a key player in neural development, significantly enhances neurite outgrowth and branching in primary hippocampal and cortical cells. Within the AMPA receptor (AMPAR) complex, Neuritin contributes to the outer core, which is part of the intricate architecture that modulates the function and properties of these receptors. The AMPAR complex, consisting of an inner core with pore-forming GluA/GRIA proteins and major auxiliary subunits, involves specific interactions with Neuritin and other components like PRRT1, PRRT2, CKAMP44/SHISA9, FRRS1L, and NRN1 in the outer core. This outer core is crucial for fine-tuning the gating, pharmacology, biogenesis, and protein processing of AMPARs. Neuritin's

involvement in the complex network of protein-protein interactions highlights its role as a regulatory element in shaping the functional properties of AMPARs and underscores its significance in neuronal connectivity.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA