

Recombinant Human NRP1 Protein, His-tagged

Cat. No. NRP1-159H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human NRP1 Protein with His tag was expressed in E. coli.

Species Human

Source E.coli

Description

Class 3 secreted semaphorin (Sema3A) is a chemorepellent that acts upon a wide variety of axons. As such, it induces a dramatic redistribution and depolymerization of actin filaments that results in growth cone collapse. Plexins are single pass, transmembrane signaling proteins encompassing Plexin A1, A2, A3 and A4. Plexins form a complex with neuropilin-1 and -2 and the cell adhesion protein L1 to form a functional semaphorin receptor. The GTPase Rnd1 binds to the cytoplasmic domain of Plexin A1 to trigger cytoskeletal collapse. In contrast, the GTPase RhoD blocks Rnd1-mediated Plexin A1 activation and repulsion of sympathetic axons by Sema3A. Neuropilin-1, a single pass transmembrane glycoprotein, was originally identified as a semaphorin receptor mediating axon growth cone collapse. In addition, neuropilin-1 is involved in axonal fasciculation, neuronal migration, dendritic guidance and repair of the adult nervous system. Neuropilin-1 is also an isoform-specific VEGF receptor on tumor and endothelial cells. Loss of neuropilin-1 function causes vascular remodeling and branching defects, which is compounded by additional loss of neuropilin-2 function.

Molecular Mass ~100 kDa

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

AA Sequence

MFRNDKCGDTIKIESPGYLTSPGYPHSYHPSEKCEWLIQAPDPYQRIMINFNPHFDL
 EDRDCKYDYVEVFDGENENGHFRGKFCGKIAPPPVSSGPFLEIKFVSDYETHGAG
 FSIRYEIFKRGPECSQNYTTSPSGVIKSPGFPEKYPNSLECTYIVFVPKMSEIILEFESFD
 LEPDSNPPGGMFCRYDRLEIWDGFPDVGPHIGRYCGQKTPGRIRSSSGILSMVFYT
 DSAIAKEGFSANYSVLQSSVSEDFKCMEALGMESGEIHSDQITASSQYSTNWSAER
 SRLNYPENGWTPGEDSYREWIQVDLGLLRFTAVGTQGAISKETKKKYYVKTYKIDV
 SSNGEDWITIKEGNKPVLFQGNTNPTDVVVAVFPKPLITRFVRIKPATWETGISMRFE
 VYGCKITDYPCSGMLGMVSGLISDSQITSSNQGDRNWMPENIRLVTSRSGWALPPA
 PHSYINEWLQIDLGEEKIVRGIIIQGGKHRENKVFMRKFKIGYSNNGSDWKMIMDDSK
 RKAJSFEGNNNYDTPELRTFPALSTRFIRIYPERATHGGLGLRMELLGCEVEAPTAG
 PTTPNGNLVDECDDDQANCHSGTGDDFQLTGGTTVLATEKPTVIDSTIQSEFPTYGF
 NCEFGWGSHKTFCHWEHDNHVQLKWSVLTSKGTGPIQDHTGDGNFIYSQADENQK
 GKVARLVSPVVYSQNSAHCMTFWYHMSGSHVGTLRVKLRYQKPEEYDQLVWMAIG
 HQGDHWKEGRVLLHKSLKLYQVIFEGEIGKGNLGGIAVDDISINNHISQEDCAKPADL
 DKKNPEIKIDETGSTPGYEGEGEGDKNISRKPGNVLKTLDP

Purity

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

Notes

For research use only, not for use in diagnostic procedure.

Storage

Store at 4 centigrade short term. Aliquot and store at -20 centigrade long term. Avoid freeze-thaw cycles.

Storage Buffer

PBS, 4M Urea, pH7.4

GENE INFORMATION

Gene Name

NRP1 neuropilin 1 [*Homo sapiens* (human)]

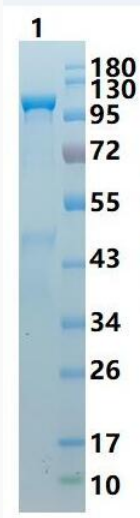
 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Official Symbol	NRP1
Synonyms	NRP1; neuropilin 1; neuropilin-1; CD304; NRP; VEGF165R; transmembrane receptor; vascular endothelial cell growth factor 165 receptor; NP1; BDCA4; DKFZp781F1414; DKFZp686A03134;
Gene ID	8829
mRNA Refseq	NM_001024628
Protein Refseq	NP_001019799
MIM	602069
UniProt ID	O14786

SDS-PAGE



Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA