PRODUCT INFORMATION

Expression system Baculovirus

Domain 22-856aa

UniProt No. 014786

NCBI Accession No. NP_003864.4

Alternative Names

Neuropilin-1 isoform a, NRP1, BDCA4, CD304, NP1, NRP, VEGF165R, Vascular endothelial cell growth factor 165 receptor

PRODUCT SPECIFICATION

Molecular Weight

94.8 kDa (843aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% glycerol

Purity > 90% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

NRP1, also known as neuropilin-1 isoform a, is a type 1 transmembrane protein. This protein is a membranebound coreceptor to a tyrosine kinase receptor for both vascular endothelial growth factor and semaphorin family members. It is a VEGF165 and semaphorin receptor expressed by vascular endothelial cells (EC) and



tumor cells. It is a co-receptor for VEGF receptor (VEGFR2) that enhances the binding of VEGF 165 to VEGFR2 and VEGF165-mediated chemotaxis. Also, it plays versatile roles in angiogenesis, axon guidance, cell survival, migration, and invasion. Recombinant human NRP1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

FRNDKCGDTI KIESPGYLTS PGYPHSYHPS EKCEWLIQAP DPYQRIMINF NPHFDLEDRD CKYDYVEVFD GENENGHFRG KFCGKIAPPP VVSSGPFLFI KFVSDYETHG AGFSIRYEIF KRGPECSQNY TTPSGVIKSP GFPEKYPNSL ECTYIVFAPK MSEIILEFES FDLEPDSNPP GGMFCRYDRL EIWDGFPDVG PHIGRYCGQK TPGRIRSSSG ILSMVFYTDS AIAKEGFSAN YSVLQSSVSE DFKCMEALGM ESGEIHSDQI TASSQYSTNW SAERSRLNYP ENGWTPGEDS YREWIQVDLG LLRFVTAVGT QGAISKETKK KYYVKTYKID VSSNGEDWIT IKEGNKPVLF QGNTNPTDVV VAVFPKPLIT RFVRIKPATW ETGISMRFEV YGCKITDYPC SGMLGMVSGL ISDSQITSSN QGDRNWMPEN IRLVTSRSGW ALPPAPHSYI NEWLQIDLGE EKIVRGIIIQ GGKHRENKVF MRKFKIGYSN NGSDWKMIMD DSKRKAKSFE GNNNYDTPEL RTFPALSTRF IRIYPERATH GGLGLRMELL GCEVEAPTAG PTTPNGNLVD ECDDDQANCH SGTGDDFQLT GGTTVLATEK PTVIDSTIQS EFPTYGFNCE FGWGSHKTFC HWEHDNHVQL KWSVLTSKTG PIQDHTGDGN FIYSQADENQ KGKVARLVSP VVYSQNSAHC MTFWYHMSGS HVGTLRVKLR YQKPEEYDQL VWMAIGHQGD HWKEGRVLLH KSLKLYQVIF EGEIGKGNLG GIAVDDISIN NHISQEDCAK PADLDKKNPE IKIDETGSTP GYEGEGEGDK NISRKPGNVL KTLDP<LEHHH HHH>

General References

Soker S., et al, (1998) Cell 92:735-745. He Z., et al, (1997) Cell 90:739-751.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

