

Neuropilin-1 Protein, Human (644a.a, HEK293, C-His)

Cat. No.:	HY-P73311A
Synonyms:	Neuropilin-1, His; CD304; NRP1; NRPNP1; VEGF165R; BDCA4
Species:	Human
Source:	HEK293
Accession:	O14786-2 (M1-K644)
Gene ID:	8829
Molecular Weight:	Approximately 90 kDa

PROPERTIES

AA Sequence

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MERGLPLLLCA    VLALVLLAPAG    AFRNDKCGDT    IKIESPGYLT
SPGYPHSYHP    SEKCEWLIQA    PDPYQRIMIN    FNPHFMLEDR
DCKYDYVEVF    DGENENGHFR    GKFCGKIAPP    PVVSSGPFLLF
IKFVSDYETH    GAGFSIRYEI    FKRGPESQSN    YTTPSGVIKS
PGFPEKYPNS    LECTYIVFVP    KMSEIILEFE    SFDLEPDSNP
PGGMFCRYDR    LEIWDGFDPDV    GPHIGRYCGQ    KTPGRIRSSS
GILSMVFYTD    SAIAKEGFSA    NYSVLQSSVS    EDFKCMEALG
MESGEIHS DQ    ITASSQYSTN    WSAERSRLNY    PENGWTPGED
SYREWIQVDL    GLLRFVTA VG    TQGAISKETK    KKYYVKTYKI
DVSSNGEDWI    TIKEGNKPV L    FQGNTNPTDV    VVAVFPKPLI
TRFVRIK PAT    WETGISMRFE    VYGCKITDYP    CSGMLGMVSG
LISDSQITSS    NQGDRNWMPE    NIRLVT SRSG    WALPPAPHSY
INEWLQIDL G    EEKIVRGI I I    QGGKHRENKV    FMRKFKIGYS
NNGSDWK MIM    DDSKRKAKS F    EGNNYDTPE    LRTFPALSTR
FIRIYPERAT    HGG LGLRME L    LGCEVEAPTA    GPTTPNGNLV
DECDDDQANC    HSGTGDDFQL    TGGTTVLATE    KPTVIDSTIQ
SGIK

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Biological Activity Measured in a cell proliferation assay using HUVEC cells. The ED₅₀ for this effect is 154.3 ng/mL, corresponding to a specific activity is 6.48×10³ units/mg.

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 ddH₂O. 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

The Neuropilin-1 protein assumes a significant role as it binds to VEGF-165, potentially inhibiting its binding to cells and inducing apoptosis by sequestering VEGF-165. This dual functionality suggests Neuropilin-1's involvement in the regulation of VEGF-mediated cellular processes. Additionally, Neuropilin-1 may interact with various members of the semaphorin family, indicating its versatility in binding to different ligands. Notably, its expression appears to exert an adverse effect on blood vessel number and integrity, suggesting a potential role in angiogenesis and vascular development. The diverse interactions and regulatory effects of Neuropilin-1 underscore its importance in orchestrating complex cellular processes and its potential implications in angiogenesis and apoptotic pathways.

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

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