# abcam

## Product datasheet

# Recombinant Human Neuropilin 1 protein ab132179

### 1 Image

#### **Description**

Product name Recombinant Human Neuropilin 1 protein

Expression system Wheat germ Accession <u>014786-2</u>

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

Sequence RNDKCGDTIKIESPGYPHSYHPSEKCEWLIQAPD

**PYQRIMINFN** 

PHFDLEDRDCKYDYVEVFDGENENGHFRGKFCGKIAPPP

**VVSSGPFLFIK** 

FVSDYETHGAGFSIRYEIFKRGPECSQNYTTPSGVIKSPGF

**PEKYPNSLE** 

CTYIVFALKMSEIILEFESFDLEPDSNPPGGMFCRYDRLEIR

**DGFPDVGP** 

HIGRYCGQKTPGRIRSSSGILSMVFYTDSAIAKEGFSANYS

VLQSSVSED

FKCMEALGMESGEIHSDQITASSQYSTNWSAERSRLNYPE

**NGWTPGEDSY** 

REWIQVDLGLLRFVTAVGTQGAISKETKKKYYVKTYKIDVS

**SNGEDWITI** 

KEGNKPVLFQGNTNPTDVVVAVFPKPLITRFVRIKPATWE

**TGISMRFEVY** 

GCKITDYPCSGMLGMVSGLISDSQITSSNQGDRNWMPENI

RLVTSRSGWA

LPPAPHSYINEWLQIDLGEEKIVRGIIIQGGKHRENKVFMRK

**FKIGYSNN** 

GSDWKMIMDDSKRKAKSFEGNNNYDTPELRTFPALSTRFI

**RIYPERATHG** 

GLGLRMELLGCEVEAPTAGPTTPNGNLVDECDDDQANC

HSGTGDDFQLTG GTTVLATEKPTVIDSTIQSGIK

Predicted molecular weight 94 kDa including tags

Amino acids 23 to 644

Tags GST tag N-Terminus

1

#### **Specifications**

Our Abpromise guarantee covers the use of ab132179 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications ELISA

Western blot SDS-PAGE

Form Liquid

#### **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

#### **General Info**

**Function** The membrane-bound isoform 1 is a receptor involved in the development of the cardiovascular

system, in angiogenesis, in the formation of certain neuronal circuits and in organogenesis outside the nervous system. It mediates the chemorepulsant activity of semaphorins. It binds to semaphorin 3A, The PLGF-2 isoform of PGF, The VEGF-165 isoform of VEGF and VEGF-B. Coexpression with KDR results in increased VEGF-165 binding to KDR as well as increased

chemotaxis. It may regulate VEGF-induced angiogenesis.

The soluble isoform 2 binds VEGF-165 and appears to inhibit its binding to cells. It may also induce apoptosis by sequestering VEGF-165. May bind as well various members of the semaphorin family. Its expression has an averse effect on blood vessel number and integrity.

**Tissue specificity**The expression of isoforms 1 and 2 does not seem to overlap. Isoform 1 is expressed by the

blood vessels of different tissues. In the developing embryo it is found predominantly in the nervous system. In adult tissues, it is highly expressed in heart and placenta; moderately in lung, liver, skeletal muscle, kidney and pancreas; and low in adult brain. Isoform 2 is found in liver

hepatocytes, kidney distal and proximal tubules.

**Sequence similarities** Belongs to the neuropilin family.

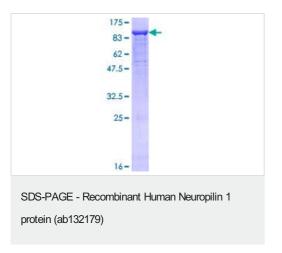
Contains 2 CUB domains.

Contains 2 F5/8 type C domains.

Contains 1 MAM domain.

**Cellular localization** Secreted and Cell membrane.

#### **Images**



12.5% SDS-PAGE analysis of ab132179 stained with Coomassie Blue.

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