

## Product datasheet for **RC203508**

### Neuropilin 1 (NRP1) (NM\_001024628) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Neuropilin 1 (NRP1) (NM_001024628) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Neuropilin 1
Synonyms:	BDCA4; CD304; NP1; NRP; VEGF165R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RC203508 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGAGGGGGCTGCCGCTCTGCGCCGTGCTCGCCCTCGTCTCGCCCCGGCCGGCGCTTTTCGCA  
 ACGATAAATGTGGCGATACTATAAAAAATTGAAAGCCCCGGGTACCTTACATCTCCTGGTTATCCTCATT  
 TTATCACCCAAGTAAAAATGCGAATGGCTGATTAGGCTCCGGACCCATACCAGAGAATTATGATCAAC  
 TTCAACCCTCACTTCGATTTGGAGGACAGAGACTGCAAGTATGACTACGTGGAAGCTTCGATGGAGAAA  
 ATGAAAAATGGACATTTTAGGGGAAAGTTCTGTGAAAGATAGCCCTCCTCCTGTTGTGCTTCAGGGCC  
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 TTCAAGAGAGGTCCTGAATGTTCCGAACTACACAACACCTAGTGGAGTGATAAAGTCCCCGGATTCC  
 CTGAAAAATATCCCAACAGCCTTGAATGCACTTATATTGCTTTTGCCTAAAGATGTCAGAGATTATCCT  
 GGATTTGAAAGCTTTGACCTGGAGCCTGACTCAAATCCTCCAGGGGGGATGTTCTGTGCTACGACCGG  
 CTAGAAATCTGGGATGGATTCCCTGATGTTGGCCCTCACATTGGGCGTACTGTGGACAGAAAACACCAG  
 GTCGAATCCGATCCTCATCGGGCATTCTCTCCATGGTTTTTACACCGACAGCGGATAGAAAAGAAGG  
 TTTCTCAGCAAATACAGTGTCTTGAGAGCAGTGTCTCAGAAGATTTCAAATGTATGGAAGCTCTGGG  
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 AGCGCTCCCGCTGAACTACCCTGAGAAATGGGTGGACTCCCGGAGAGGATTCCTACCGAGAGTGGATA  
 GGATAGACTTGGGCTTCTGCGCTTTGTACGGCTGTGGGACACAGGGCGCCATTTCAAAGAAACCAAG  
 AAGAAATATTATGTCAAGACTTACAAGATCGACGTTAGCTCCAACGGGGAAGACTGGATCACCATAAAAG  
 AAGGAAACAAACCTGTTCTTTTCAGGAAACACCAACCCACAGATGTTGTGGTTGCAGTATTTCCCAA  
 ACCACTGATAACTCGATTTGTCCGAATCAAGCCTGCAACTTGGGAACTGGCATATCTATGAGATTTGAA  
 GTATACGGTTGCAAGATAACAGATTATCCTTGCTCTGGAATGTTGGGTATGGTGTCTGGACTTATTCTG  
 ACTCCCAGATCACATCATCCAACCAAGGGGACAGAAACTGGATGCCTGAAAACATCCGCCTGGTAACCAG  
 TCGCTCTGGCTGGGCACTTCCACCCGCACCTCATTCTACATCAATGAGTGGCTCCAAATAGACCTGGG  
 GAGGAGAAGATCGTGAGGGGCATCATCATTAGGGTGGGAAGCACCGAGAGAACAAGGTGTTATGAGGA  
 AGTTCAAGATCGGTACAGCAACAACGGCTCGGACTGGAAGATGATCATGGATGACAGCAAACGCAAGGC  
 GAAGTCTTTTGGGGCAACAACAACTATGATACACCTGAGCTGCGGACTTTCCAGCTCTCTCCACGCGA  
 TTCATCAGGATCTACCCGAGAGAGCCACTCATGGCGACTGGGGCTCAGAAATGGAGCTGCTGGGCTGTG  
 AAGTGGAAAGCCCCACAGCTGGACCGACCACTCCAACGGGAAGTGGTGGATGAATGTGATGACGACCA  
 GGCAACTGCCACAGTGGAAACAGGTGATGACTTCCAGCTCACAGGTGGCACCCTGTGCTGGCCACAGAA  
 AAGCCACGGTCATAGACAGCACCATAAATCAGGTATCAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203508 protein sequence  
Red=Cloning site Green=Tags(s)

```
MERGLPLLCAVLALVLAPAGAFRNDKCGDTIKIESPGYL TSPGYPHSYHPSEKCEWLIQAPDPYQRIMIN
FNPHFDLEDRDCKYDYVEVFDGENENGHFRGKFCGKIAPPPVSSGPFLLIKFVSDYETHGAGFSIRYEI
FKRGPECSQNYTTPSGVIKSPGFPEKYPNSLECTYIVFAPKMSEIILEFESFDLEPDSNPPGGMFCRYDR
LEIWDGFPDVGPHIGRYCGQKTPGRIRSSSGILSMVFYTD SAIAKEGFSANYSVLQSSVSEDFKCMEALG
MESGEIHSQDITASSQYSTNWSAERSRLNYPENGWTPGEDSYREWIQVDLGLLRFVTAVGTQGAISKETK
KKYYVKTYKIDVSSNGEDWITIKEGNKPVLFQGNTPD VVAVFPKPLITRFVRIKPATWETGISMRFE
VYGCKITDYPCSGMLGMVSLISDSQITSSNQDRNWMPENIRL VTSRSGWALPPAPHSYINEWLQIDLG
EEKIVRGI IQGKHKRENKVFMRKFKIGYSNNGSDWKIMDDSKRKA KSFEGNNNYDTPELRTFPALSTR
FIRIYPERATHGGLGRMELLGCEVEAPTAGPTTPNGNL VDECDDDQANCHSGTGDDFQLTGTTVLATE
KPTVIDSTIQSGIK
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6413\\_d12.zip](https://cdn.origene.com/chromatograms/mk6413_d12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001024628

**ORF Size:** 1932 bp

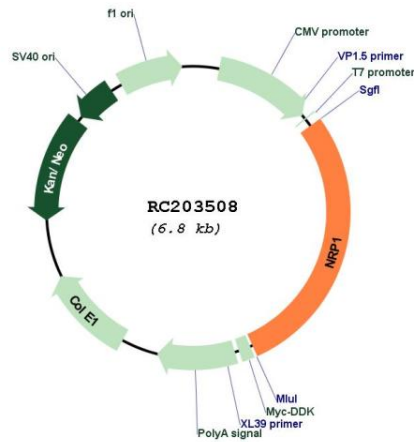
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

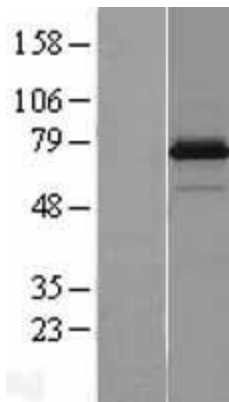
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001024628.2</a>
<b>RefSeq Size:</b>	2478 bp
<b>RefSeq ORF:</b>	1935 bp
<b>Locus ID:</b>	8829
<b>UniProt ID:</b>	<a href="#">O14786</a>
<b>Cytogenetics:</b>	10p11.22
<b>Protein Families:</b>	Druggable Genome, Secreted Protein, Transmembrane
<b>Protein Pathways:</b>	Axon guidance
<b>MW:</b>	71.9 kDa
<b>Gene Summary:</b>	<p>This gene encodes one of two neuropilins, which contain specific protein domains which allow them to participate in several different types of signaling pathways that control cell migration. Neuropilins contain a large N-terminal extracellular domain, made up of complement-binding, coagulation factor V/VIII, and meprin domains. These proteins also contains a short membrane-spanning domain and a small cytoplasmic domain. Neuropilins bind many ligands and various types of co-receptors; they affect cell survival, migration, and attraction. Some of the ligands and co-receptors bound by neuropilins are vascular endothelial growth factor (VEGF) and semaphorin family members. This protein has also been determined to act as a co-receptor for SARS-CoV-2 (which causes COVID-19) to infect host cells. [provided by RefSeq, Nov 2020]</p>

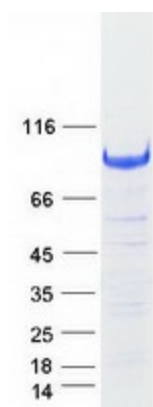
Product images:



Circular map for RC203508



Western blot validation of overexpression lysate (Cat# [LY422521]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203508 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NRP1 protein (Cat# [TP303508]). The protein was produced from HEK293T cells transfected with NRP1 cDNA clone (Cat# RC203508) using MegaTran 2.0 (Cat# [TT210002]).