

**Anti-Neuropilin 1 NRP1 Rabbit Monoclonal Antibody**  
**Catalog # ABO14114****Specification****Anti-Neuropilin 1 NRP1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	<a href="#">O14786</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Neuropilin 1 NRP1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Neuropilin 1 NRP1 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 8829

**Other Names**

Neuropilin-1, Vascular endothelial cell growth factor 165 receptor, CD304, NRP1 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=8004](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=8004) target="\_blank">HGNC:8004</a>), NRP, VEGF165R

**Calculated MW**

103134 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

**Subcellular Localization**

Cell membrane; Single-pass type I membrane protein.

**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.

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Neuropilin 1

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## **Anti-Neuropilin 1 NRP1 Rabbit Monoclonal Antibody - Protein Information**

**Name** NRP1 ([HGNC:8004](#))

**Synonyms** NRP, VEGF165R

### **Function**

Cell-surface 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. Mediates the chemorepulsant activity of semaphorins (PubMed:<a href="http://www.uniprot.org/citations/10688880" target="\_blank">10688880</a>, PubMed:<a href="http://www.uniprot.org/citations/9288753" target="\_blank">9288753</a>, PubMed:<a href="http://www.uniprot.org/citations/9529250" target="\_blank">9529250</a>). Recognizes a C-end rule (CendR) motif R/KXXR/K on its ligands which causes cellular internalization and vascular leakage (PubMed:<a href="http://www.uniprot.org/citations/19805273" target="\_blank">19805273</a>). It binds to semaphorin 3A, the PLGF-2 isoform of PGF, the VEGF165 isoform of VEGFA and VEGFB (PubMed:<a href="http://www.uniprot.org/citations/10688880" target="\_blank">10688880</a>, PubMed:<a href="http://www.uniprot.org/citations/19805273" target="\_blank">19805273</a>, PubMed:<a href="http://www.uniprot.org/citations/9288753" target="\_blank">9288753</a>, PubMed:<a href="http://www.uniprot.org/citations/9529250" target="\_blank">9529250</a>). Coexpression with KDR results in increased VEGF165 binding to KDR as well as increased chemotaxis. Regulates VEGF-induced angiogenesis. Binding to VEGFA initiates a signaling pathway needed for motor neuron axon guidance and cell body migration, including for the caudal migration of facial motor neurons from rhombomere 4 to rhombomere 6 during embryonic development (By similarity). Regulates mitochondrial iron transport via interaction with ABCB8/MITOSUR (PubMed:<a href="http://www.uniprot.org/citations/30623799" target="\_blank">30623799</a>).

### **Cellular Location**

[Isoform 2]: Secreted

### **Tissue Location**

[Isoform 1]: The expression of isoforms 1 and 2 does not seem to overlap. Expressed in olfactory epithelium (at protein level) (PubMed:33082293). Expressed in fibroblasts (at protein level) (PubMed:36213313). 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 (PubMed:10688880, PubMed:9529250). Expressed in the central nervous system, including olfactory related regions such as the olfactory tubercles and paraolfactory gyri (PubMed:33082293)

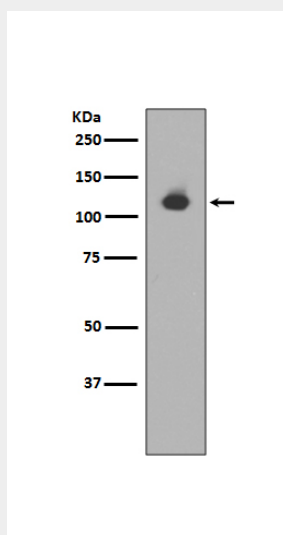
## **Anti-Neuropilin 1 NRP1 Rabbit Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

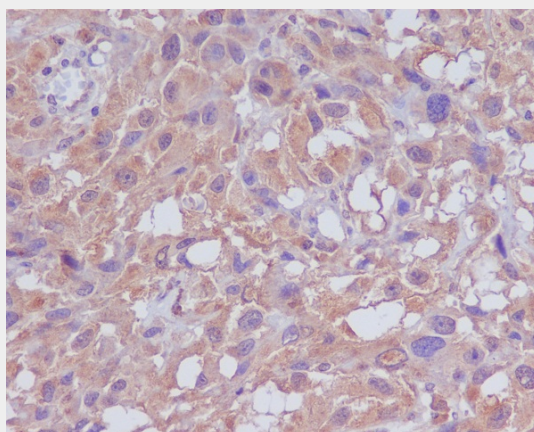
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Neuropilin 1 NRP1 Rabbit Monoclonal Antibody - Images



Western blot analysis of Neuropilin 1 expression in mouse heart lysate.



Immunohistochemical analysis of paraffin-embedded human melanoma, using Neuropilin 1 Antibody.