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Anti-NRP1 / VEGF165R / CD304 Reference Antibody (vesencumab)

Recombinant Antibody
Catalog # APR10242

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	O14786
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	103134

Additional Information

Target/Specificity	NRP1 / VEGF165R / CD304
Endotoxin Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

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:10688880, PubMed:9288753, PubMed:9529250). Recognizes a C-end rule (CendR) motif R/KXXR/K on its ligands which causes cellular internalization and vascular leakage (PubMed:19805273). It binds to semaphorin 3A, the PLGF-2 isoform of PGF, the VEGF165 isoform of VEGFA and VEGFB (PubMed:10688880, PubMed:19805273, PubMed:9288753, PubMed:9529250). 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:30623799).

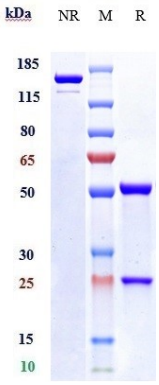
Cellular Location

[Isoform 2]: Secreted Secreted. Note=(Microbial infection) Proteolytically cleaved at the cell membrane upon H.pylori infection.

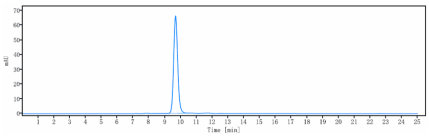
Tissue Location

[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)

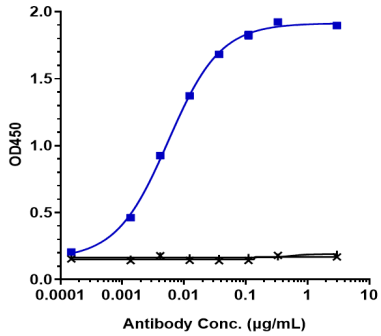
Images



Anti-NRP1 / VEGF165R / CD304 Reference Antibody (vesencumab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.

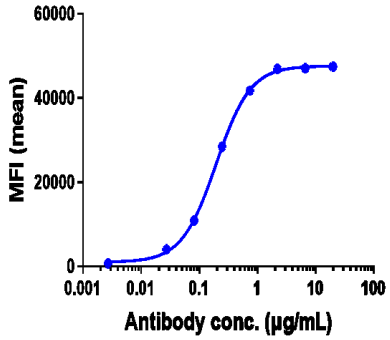


The purity of Anti-NRP1 / VEGF165R / CD304 Reference Antibody (vesencumab) is 100%, determined by SEC-HPLC.



Immobilized human NRP1 His at 2 ug/mL can bind Anti-NRP1 / VEGF165R / CD304 Reference Antibody (vesencumab), EC50=0.005571 ug/mL.

Human NRP1 HEK293 cells were stained with Anti-NRP1 / VEGF165R / CD304 Reference Antibody (vesencumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC50=0.1948 ug/mL.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.