

Active Recombinant Rat Neuropilin 2, His-tagged

Cat. No. Nrp2-492R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Nrp2 is expressed in Murine myeloma cell line, which has a molecule weight of 120 kDa. Gln23 Asp857 (Val809 Asp825 del).
Species	Rat
Source	Mammalian Cells
Description	<p>Neuropilin1 (Npn1, previously known as neuropilin) and Npn2 (previously known as Npn1 related molecule) are type I transmembrane proteins that bind members of the class III secreted semaphorin subfamily which are implicated in repulsive axon guidance. The extracellular domain of these proteins is composed of two N-terminal CUB (complement binding) domains (domains a1 and a2), two domains with homology to coagulation factors V and VIII (domains b1 and b2) and a MAM (meprin) domain (domain c). In the absence of ligands, neuropilins can form homo and heterooligomers via hemophilic interactions of their MAM domains. At the amino acid sequence level, Npn1 and Npn2 share 44% identity. Npn1 and Npn2 show different binding specificities for different members of the semaphorin family. The expression patterns of Npn1 and Npn2 in developing neurons of the central and peripheral nervous systems are largely, though not completely nonoverlapping.</p>
Form	Lyophilized from a 0.2 μm filtered solution in PBS.
N-terminal Sequence	No results obtained: Gln23 predicted
Molecular Weight	120 kDa

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Activity	Measured by its bindingability in a functional ELISA. Immobilized rrNpn2/Fc Chimera at 5 g/mL (100μ/well) can bind rhVEGF165 in the presence of 2 g/mL of heparin with an apparentKd < 1nM.
Purity	>90%, by SDS-PAGEunder reducing conditions and visualized by silver stain.
Endotoxin Level	<1.0 EU per 1 μg of the proteinby the LAL method.
Reconstitution	Reconstitute at 200 μg/mL in PBS.
Storage	Use a manual defrostfreezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt,-20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution.3 months, -20 to -70 °C under sterile conditions after reconstitution.
OfficialSymbol	Nrp2
GENE INFORMATION	
Gene Name	Nrp2 neuropilin 2 [Rattus norvegicus]
Synonyms	Nrp2; neuropilin 2; neuropilin-2;vascular endothelial cell growth factor 165 receptor 2; VEGF165R2; VEGF1265R2;NPN2; MGC126574; NP2; PRO27142; neuropilin-2a(17); neuropilin-2a(22); neuropilin-2b(0);receptor for VEGF165 and semaphorins class3; OTTHUMP00000163807; OTTHUMP00000163808;OTTHUMP00000206352; OTTHUMP00000206353; OTTHUMP00000206354; OTTHUMP00000206355
Gene ID	81527
mRNA Refseq	NM_030869

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Protein Refseq	NP_110496
UniProt ID	O35276
Chromosome Location	9q31
Pathway	Axon guidance; DevelopmentalBiology; L1CAM interactions; Neurophilin interactions with VEGF and VEGFR; NrCAMinteractions; Signal Transduction; Signaling by VEGF; VEGF ligand-receptor interactions
Function	heparin binding; metalion binding; receptor activity; semaphorin receptor activity

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