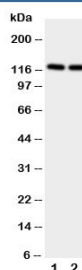


NRP2 Antibody (R30864)

Catalog No.	Formulation	Size
R30864	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	O60462
Applications	Western Blot : 0.5-1ug/ml
Limitations	This NRP2 antibody is available for research use only.



Western blot testing of NRP2 antibody and Lane 1: rat brain; 2: rat testis. Predicted size: 116-130KD

Description

Neuropilin-2, also called Npn2 or VEGF165R2, is a member of the neuropilin family of receptor proteins. Semaphorin 3b can act to repulse axons expressing neuropilin-2 and can antagonize the repulsive action of Semaphorin 3a on axonal growth cones expressing neuropilin-1. NRP2 may play a role in cardiovascular development, axon guidance, and tumorigenesis. Mice with null mutations in genes encoding Semaphorin 3F, and its holoreceptor components NRP2 and Plexin A3 (PLEXA3) exhibit increased dentate gyrus granule cell and cortical layer V pyramidal neuron spine number and size, and also aberrant spine distribution. Moreover, Semaphorin 3F promotes loss of spines and excitatory synapses in dissociated neurons in vitro, and in NRP2-null brain slices cortical layer V and dentate gyrus granule cells exhibit increased miniature excitatory

postsynaptic current frequency. These disparate effects of secreted semaphorins are reflected in the restricted dendritic localization of Neuropilin-2 to apical dendrites and of NRP1 to all dendrites of cortical pyramidal neurons.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the NRP2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 45-60 (YPQDYPSHQNCEWIVY-human) were used as the immunogen for this NRP2 antibody (100% mouse homology).

Storage

After reconstitution, the NRP2 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.