

Anti-Neuropilin-2 Antibody

Catalog # ABO11078

Product Information

Application	WB
Primary Accession	O60462
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Neuropilin-2(NRP2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	8828
Other Names	Neuropilin-2, Vascular endothelial cell growth factor 165 receptor 2, NRP2, VEGF165R2
Calculated MW	104831
Application Details	Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse
Subcellular Localization	Membrane; Single-pass type I membrane protein.
Source	Eukaryota
Protein Name	Neuropilin-2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human NRP2(45-60aa YPQDYPSHQNCEWIVY), identical to the related mouse sequence and different from the related rat sequence by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the neuropilin family.

Protein Information

Name	NRP2
Synonyms	VEGF165R2
Function	High affinity receptor for semaphorins 3C, 3F, VEGF-165 and VEGF-145 isoforms of VEGF, and the PLGF-2 isoform of PGF.
Cellular Location	Membrane; Single- pass type I membrane protein

Background

NRP2(Neuropilin-2), also called Npn2 or VEGF165R2, encodes a member of the neuropilin family of receptor proteins. The soluble NRP2 was secreted as a 62.5-kD protein following transfection in Chinese hamster ovary cells. The NRP2 gene is mapped on 2q33.3. The NRP2 gene contains 17 exons and spans about 112 kb. Sema3b can act to repulse axons expressing neuropilin-2 and can antagonize the repulsive action of Sema3a on axonal growth cones expressing neuropilin-1. This protein may play a role in cardiovascular development, axon guidance, and tumorigenesis. Mice with null mutations in genes encoding Sema3F, and its holoreceptor components Npn2 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, Sema3F promotes loss of spines and excitatory synapses in dissociated neurons in vitro, and in Npn2-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 Npn2 to apical dendrites and of Npn1 to all dendrites of cortical pyramidal neurons.

Images



Anti-NRP2 antibody, ABO11078, Western blotting
All lanes:
Anti NRP2 (ABO11078) at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: Rat Testis Tissue Lysate at 50ug
Predicted bind size: 105KD
Observed bind size: 105KD

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