Datasheet for ABIN7539267

anti-Neuropilin 1 antibody

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Overview

Quantity:	100 µg
Target:	Neuropilin 1 (NRP1)
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Neuropilin 1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	NRP-1 antibody
Immunogen:	Recombinant human NRP-1 (ABIN7539343)
Specificity:	Chromosomal location:10p12
Purification:	Protein A purified

Target Details

Target:	Neuropilin 1 (NRP1)
Alternative Name:	NRP-1 (NRP1 Products)
Background:	Neuropilin receptor-1, VEGF165R, NRP, CD304, neuropilin,Neuropilin-1 (NRP-1, CD304) is a 130-140 kDa type I transmembrane glycoprotein that regulates axon guidance and angiogenesis. The human NRP-1 contains a 623 aa extracellular domain (ECD) that shows 92-95 % aa identity with mouse, rat, bovine and canine NRP-1. The ECD contains two N-terminal CUB domains

Target Details

	(termed a1a2), two domains with homology to coagulation factors V and VIII (b1b2) and a MAM (meprin) domain. C-terminally divergent splice variants with 704, 644, 609, and 551 aa lack the MAM and TM domains and are demonstrated or presumed to be soluble antagonists. Heparin, the heparin-binding forms of VEGF (VEGF165, VEGF-B, VEGF-E), PlGF-2, and the C-terminus of Sema3 bind the b1b2 region. NRP-1 and NRP-2 share 48 % aa identity within the ECD and can form homo and hetero-oligomers via interaction of their MAM domains. Neuropilins show partially overlapping expression in neuronal and endothelial cells during development. Both neuropilins act as coreceptors with Plexins, mainly Plexin A3 and A4, to bind class III Semaphorins that mediate axon repulsion. However, only NRP-1 binds Sema3A, and only NRP-2 binds Sema 3F. Both are co-receptors with VEGFR-2 (KDR7Flk1) for VEGF165 binding. Sema 3A signaling can be blocked by VEGF165, which has higher affinity for NRP-1. NRP-1 is preferentially expressed in arteries during development or those undergoing remodeling. NRP-1 is also expressed on dendritic cells and mediates DC-induced T-cell proliferation
Gene ID:	8829
NCBI Accession:	NM_003873, NP_003864
UniProt:	O14786
Pathways:	Regulation of Cell Size, Signaling Events mediated by VEGFR1 and VEGFR2, Smooth Muscle Cell Migration, Platelet-derived growth Factor Receptor Signaling, VEGFR1 Specific Signals

Application Details

Application Notes:	Western Blot: Use 1-5 µg/mL
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/mL.
Buffer:	PBS
Storage:	4 °C,-20 °C
Storage Comment:	The lyophilized antibody is stable for at least 2 years at -20°C. After sterile reconstitution the antibody is stable at 2-8°C for up to 6 months. Frozen aliquots are stable for at least 6 months

Handling

	when stored at -20°C. Addition of a carrier protein or 50% glycerol is recommended for frozen aliquots.
Expiry Date:	24 months