

Product datasheet

Biotin Anti-Neuropilin 1 antibody ab83435

Overview

Product name	Biotin Anti-Neuropilin 1 antibody
Description	Biotin Goat polyclonal to Neuropilin 1
Host species	Goat
Conjugation	Biotin
Tested applications	Suitable for: Sandwich ELISA, WB, ELISA
Species reactivity	Reacts with: Human
Immunogen	Highly pure (>98%) recombinant human Neuropilin 1
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Lyophilized:Reconstitute in sterile PBS containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Constituent: PBS
Purity	IgG fraction
Purification notes	ab83435 is sterile filtered. This antibody was purified by affinity chromatography and then biotinylated.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab83435 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration. When used as detection antibody paired with recommended antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant human Neuropilin 1.
WB		Use at an assay dependent concentration. Predicted molecular weight: 103 kDa. The detection limit for recombinant human Neuropilin 1 is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.
ELISA		Use at an assay dependent concentration. Allows the detection of at least 0.2 - 0.4 ng/well of recombinant human Neuropilin 1.

Target

Function

The membrane-bound isoform 1 is a 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. It mediates the chemorepulsant activity of semaphorins. It binds to semaphorin 3A, The PLGF-2 isoform of PGF, The VEGF-165 isoform of VEGF and VEGF-B. Coexpression with KDR results in increased VEGF-165 binding to KDR as well as increased chemotaxis. It may regulate VEGF-induced angiogenesis.

The soluble isoform 2 binds VEGF-165 and appears to inhibit its binding to cells. It may also induce apoptosis by sequestering VEGF-165. May bind as well various members of the semaphorin family. Its expression has an averse effect on blood vessel number and integrity.

Tissue specificity

The expression of isoforms 1 and 2 does not seem to overlap. Isoform 1 is 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. Isoform 2 is found in liver hepatocytes, kidney distal and proximal tubules.

Sequence similarities

Belongs to the neuropilin family.
Contains 2 CUB domains.
Contains 2 F5/8 type C domains.
Contains 1 MAM domain.

Cellular localization

Secreted and Cell membrane.

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