

Biotin Anti-VEGFA antibody ab83132

[1 Image](#)

Overview

Product name	Biotin Anti-VEGFA antibody
Description	Biotin Rabbit polyclonal to VEGFA
Host species	Rabbit
Conjugation	Biotin
Tested applications	Suitable for: Sandwich ELISA
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein corresponding to Human VEGFA.
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:Centrifuge vial prior to opening. 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	Constituent: PBS
Purity	IgG fraction
Purification notes	ab83132 was purified by affinity chromatography and then biotinylated. Filter sterilised.
Clonality	Polyclonal
Isotype	IgG

Applications

The **Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab83132 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 a concentration of 0.25 - 1 µg/ml. To detect hVEGF by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.25 - 1.0 µg/ml of this antibody as Capture is required. This biotinylated polyclonal antibody, paired with the above recommended pair, allows the detection of at least 0.2 - 0.4 ng/well of recombinant hVEGF.

Target

Function

Growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. Induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. Binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth.

Tissue specificity

Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed.

Involvement in disease

Defects in VEGFA are a cause of susceptibility to microvascular complications of diabetes type 1 (MVCD1) [MIM:603933]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.

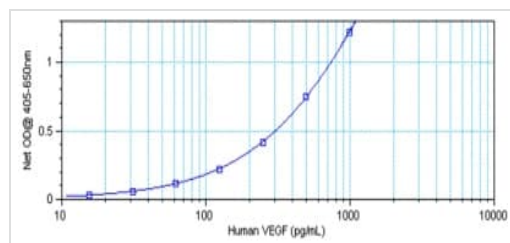
Sequence similarities

Belongs to the PDGF/VEGF growth factor family.

Cellular localization

Secreted. VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and, although a significant proportion remains cell-associated, most is freely secreted. VEGF189 is very basic, it is cell-associated after secretion and is bound avidly by heparin and the extracellular matrix, although it may be released as a soluble form by heparin, heparinase or plasmin.

Images



Detected human VEGF in a sandwich ELISA within the range 16-1000 pg/ml

- 0.5 µg/ml of capture antibody (**ab9570**)

- 0.25 µg/ml of detection antibody (ab83132)

Sandwich ELISA - Biotin Anti-VEGFA antibody (ab83132)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors