abcam

Product datasheet

Anti-VEGFA antibody [EP1176Y] - C-terminal ab52917

Recombinant RabMAb

★★★★★ 9 Abreviews 190 References 5 Images

Overview

Product name Anti-VEGFA antibody [EP1176Y] - C-terminal

Description Rabbit monoclonal [EP1176Y] to VEGFA - C-terminal

Host species Rabbit

Specificity We do not guarantee IHC-P for mouse.

This antibody fails to detect endogenous natural samples in WB. We recommend to use

ab214424 for WB.

Tested applications Suitable for: IHC-P, ICC/IF, Flow Cyt (Intra)

Unsuitable for: WB

Species reactivity Reacts with: Mouse, Human

Immunogen Synthetic peptide within Human VEGFA aa 200 to the C-terminus (C terminal). The exact

sequence is proprietary. Database link: **P15692**

Positive control IHC-P: Human kidney tissue. ICC/IF: NIH/3T3 cells. Flow Cyt (intra): NIH/3T3 cells.

General notes Abcam recommended secondaries - Goat Anti-Rabbit HRP (ab205718) and Goat Anti-Rabbit

Alexa Fluor® 488 (ab150077). Or search our wide range of secondary antibodies for use with

your experiment.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

1

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol, PBS, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EP1176Y

Isotype IgG

Applications

The Abpromise guarantee Our Abp

Our **Abpromise guarantee** covers the use of ab52917 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
IHC-P	★★★★★ (6)	1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse recommendation is based on the WB results. We do not guarantee IHC-P for mouse. See IHC antigen retrieval protocols.
ICC/IF	★★★★ (1)	1/250 - 1/500.
Flow Cyt (Intra)		1/30. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/100 - 1/1000 dilution.

Application notes

Is unsuitable for WB.

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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 diseaseDefects 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

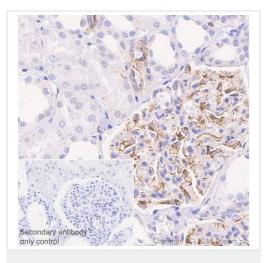
vascular permeability and increased tissue ischemia and angiogenesis.

Sequence similaritiesBelongs 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 signicant 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

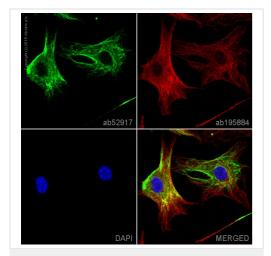


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VEGFA antibody
[EP1176Y] (ab52917)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling VEGFA with purified ab52917 at 1:100 dilution (2.96 µg/ml).

Heat mediated antigen retrieval was performed using citrate buffer, pH 6.0.

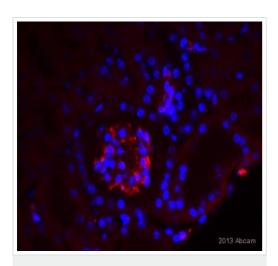
Negative control shown in inset.



Immunocytochemistry/ Immunofluorescence - Anti-VEGFA antibody [EP1176Y] (ab52917) Purified ab52917 staining VEGF in NIH/3T3 (Mouse embryo fibroblast cell line) cells.

The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with purified ab52917 at 5 μ g/ml and <u>ab195884</u>, at 1/250 dilution, overnight at +4°C, followed by a further incubation at room temperature for 1h with an Goat anti-Rabbit Alexa Fluor[®]488 secondary (<u>ab150081</u>) at 2 μ g/ml (shown in green).

Nuclear DNA was labeled in blue with DAPI.

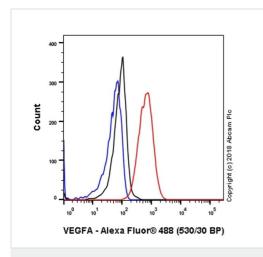


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VEGFA antibody
[EP1176Y] (ab52917)

This image is courtesy of an anonymous Abreview

Unpurified ab52917 staining VEGF in mouse kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehydefixed, paraffin-embedded sections).

Tissue was fixed with paraformaldehyde, permeabilized with 0.3% Triton X-100 and blocked with 5% serum for 45 minutes at 25°C. Samples were incubated with primary antibody (1/400 in 4% BSA + 5% serum in PBST) for 14 hours at 4°C. An Alexa Fluor[®] 546-conjugated Donkey anti-rabbit IgG polyclonal (1/300) was used as the secondary antibody.

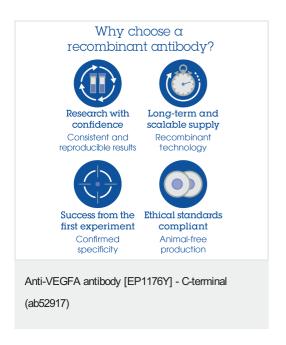


Flow Cytometry (Intracellular) - Anti-VEGFA antibody [EP1176Y] - C-terminal (ab52917)

Intracellular Flow Cytometry analysis of NIH/3T3 (Mouse embryonic fibroblast) cells labeling VEGFA with purified ab52917 at 1/30 dilution ($10\mu g/ml$) (red).

Cells were fixed with 4% paraformaldehyde. A Goat anti rabbit lgG (Alexa Fluorr® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal lgG (Black).

Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



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