

# Anti-VEGFA antibody [EP1176Y] - BSA and Azide free ab185238

Recombinant RabMAb

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## Overview

<b>Product name</b>	Anti-VEGFA antibody [EP1176Y] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EP1176Y] to VEGFA - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Specificity</b>	<p>We do not guarantee IHC-P for mouse.</p> <p>This antibody fails to detect endogenous natural samples in WB. We recommend to use <a href="#">ab214424</a> for WB.</p>
<b>Tested applications</b>	<p><b>Suitable for:</b> Flow Cyt (Intra), ICC/IF, IHC-P</p> <p><b>Unsuitable for:</b> WB</p>
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human kidney tissue. ICC/IF: NIH/3T3 cells. Flow Cyt (Intra): NIH/3T3 cells.
<b>General notes</b>	<p>ab185238 is the carrier-free version of <a href="#">ab52917</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul>

For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1176Y
Isotype	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab185238 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
Flow Cyt (Intra)		Use at an assay dependent concentration. <b>ab199376</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
IHC-P		1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for WB.

## 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) [MM: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.

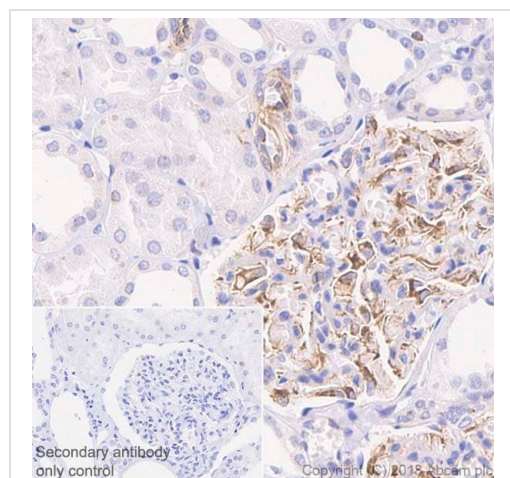
## Sequence similarities

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.

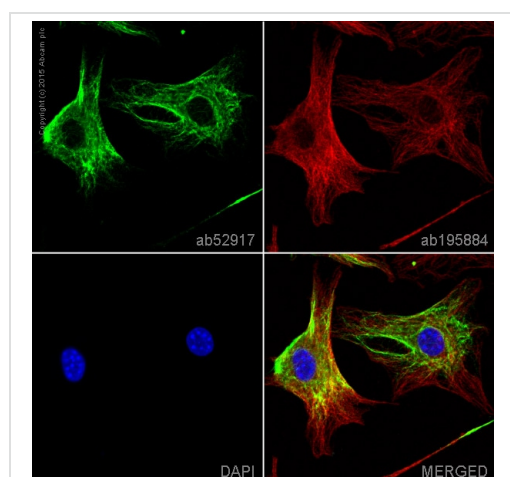
## Images



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 **ab93684** (Tris/EDTA buffer, pH 9.0)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab52917**).

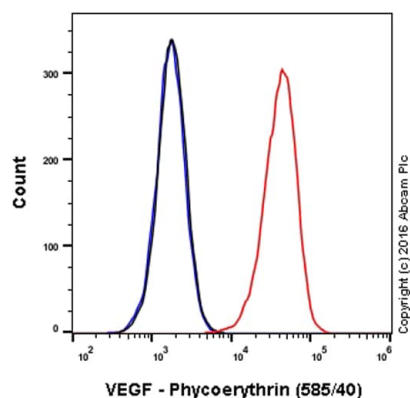
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)



Purified **ab52917** staining VEGF in NIH3T3 cells. The cells were fixed with 4% formaldehyde (10min), 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 5µg/ml and **ab195884**, 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 (**ab150081**) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

Immunocytochemistry/ Immunofluorescence - Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)

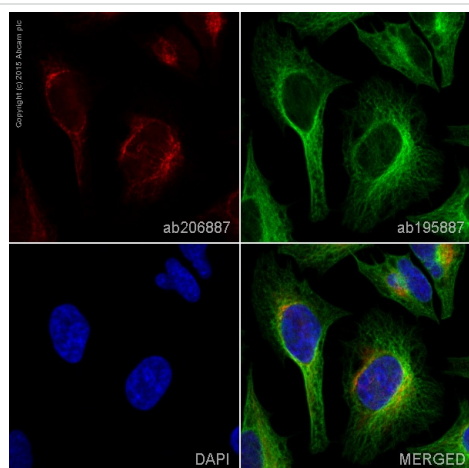
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab52917**).



Flow Cytometry (Intracellular) - Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)

Clone EP1176Y (ab185238) has been successfully conjugated by Abcam. This image was generated using Anti-VEGFA antibody [EP1176Y] (PE). Please refer to [ab209439](#) for protocol details.

Overlay histogram showing HeLa cells stained with [ab209439](#) (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 90% methanol at -20°C for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody ([ab209439](#), 1/2500 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Phycoerythrin ([ab209478](#)) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20 mW Solid State Blue Laser (488nm) and 585/40 bandpass filter.

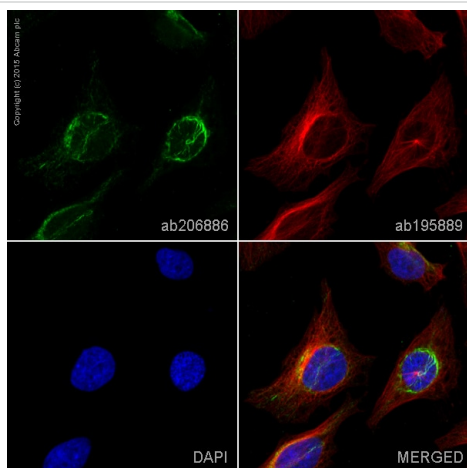


Immunocytochemistry/ Immunofluorescence - Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)

Clone EP1176Y (ab185238) has been successfully conjugated by Abcam. This image was generated using Anti-VEGFA antibody [EP1176Y] (Alexa Fluor® 647). Please refer to [ab206887](#) for protocol details.

[ab206887](#) staining VEGF in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with [ab206887](#) at 1/100 dilution (shown in red) and [ab195887](#), Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

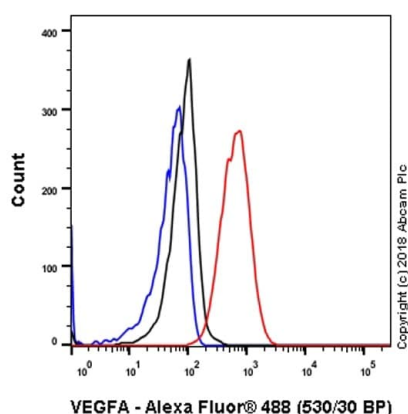


Immunocytochemistry/ Immunofluorescence - Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)

Clone EP1176Y (ab185238) has been successfully conjugated by Abcam. This image was generated using Anti-VEGFA antibody [EP1176Y] (Alexa Fluor® 488). Please refer to [ab206886](#) for protocol details.

[ab206886](#) staining VEGF in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells. The cells were fixed with 4% formaldehyde (10 minutes), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1 hour. The cells were then incubated overnight at +4°C with [ab206886](#) at 1/1000 dilution (shown in green) and [ab195889](#), Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

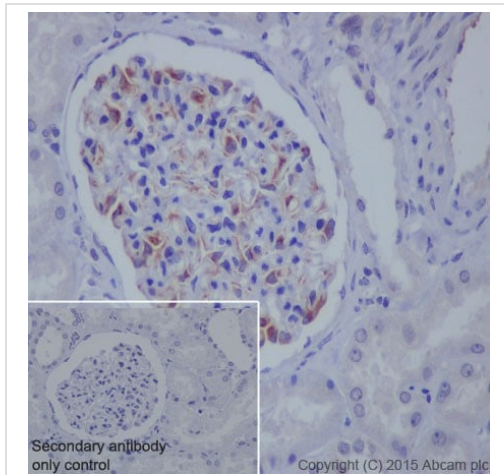
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)

Intracellular Flow Cytometry analysis of NIH/3T3 (Mouse embryonic fibroblast) cells labeling VEGFA with purified [ab52917](#) at 1/30 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

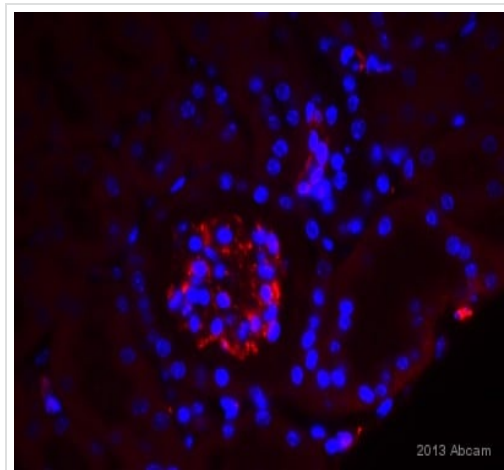
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab52917](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)

Immunohistochemistry (Paraffin-embedded sections) analysis of Human kidney tissue labeling VEGF with ab185238 at 1/250. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0. Anti-rabbit IgG H&L (HRP) ([ab97051](#)) was used as the secondary antibody. Counterstained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab52917](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)

This image is courtesy of an anonymous Abreview.

Unpurified [ab52917](#) staining VEGF in Mouse kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab52917](#)).



### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-VEGFA antibody [EP1176Y] - BSA and Azide free (ab185238)

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