# abcam

### Product datasheet

## Anti-VEGF Receptor 2 antibody [EPR21231] ab234110

Recombinant

★★★☆☆ 1 Abreviews 4 Images

#### Overview

Product name	Anti-VEGF Receptor 2 antibody [EPR21231]
Description	Rabbit monoclonal [EPR21231] to VEGF Receptor 2
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. Database link: <u>P35968</u>
Positive control	ICC/IF: HUVEC cell line. Flow Cy: HUVEC cell line
General notes	This product was made using <b>synthetic libraries and phage display technology</b> .
	This antibody is a recombinant chimeric antibody. Rabbit chimeric monoclonal antibody (Human Fab/ Rabbit Fc).

#### 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.
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
Clonality	Monoclonal
Clone number	EPR21231
lsotype	lgG1

#### Applications

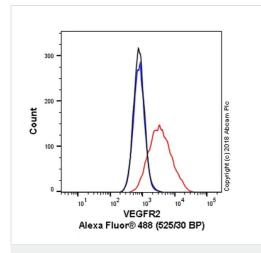
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab234110 in the following tested applications.

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

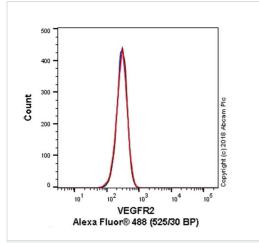
Application	Abreviews	Notes
ICC/IF	<b>★★★☆☆(1)</b>	Use a concentration of 5 µg/ml.
Flow Cyt		Use a concentration of 10 µg/ml.

Target	
Function	Receptor for VEGF or VEGFC. Has a tyrosine-protein kinase activity. The VEGF-kinase ligand/receptor signaling system plays a key role in vascular development and regulation of vascular permeability. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.
Involvement in disease	Defects in KDR are associated with susceptibility to hemangioma capillary infantile (HCI) [MIM:602089]. HCI are benign, highly proliferative lesions involving aberrant localized growth of capillary endothelium. They are the most common tumor of infancy, occurring in up to 10% of all births. Hemangiomas tend to appear shortly after birth and show rapid neonatal growth for up to 12 months characterized by endothelial hypercellularity and increased numbers of mast cells. This phase is followed by slow involution at a rate of about 10% per year and replacement by fibrofatty stroma.
Sequence similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily. Contains 7 lg-like C2-type (immunoglobulin-like) domains. Contains 1 protein kinase domain.
Post-translational modifications	Phosphorylated. Dephosphorylated by PTPRB. Dephosphorylated by PTPRJ at Tyr-951, Tyr-996, Tyr-1054, Tyr-1059, Tyr-1175 and Tyr-1214.
Cellular localization	Membrane.

#### Images



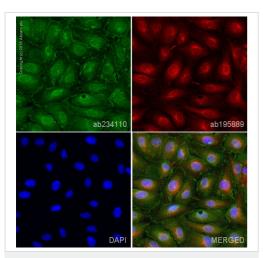
Flow Cytometry - Anti-VEGF Receptor 2 antibody [EPR21231] (ab234110) Overlay histogram showing HUVEC cells stained with ab234110 (red line).The cells were incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab234110, 1/10 dilution) for 30 min at 4°C. The secondary antibody (black line) used was Alexa Fluor® 488 goat anti-rabbit lgG (H&L) (<u>ab150081</u>) at 1/2000 dilution for 30 min at 4°C. Unlabelled sample (blue line) was also used as a control. Acquisition of >30,000 total events were collected.



Overlay histogram showing Jurkat cells stained with ab234110 (red line). The cells were incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab234110, 1/10 dilution) for 30 min at 4°C. The secondary antibody (black line) used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (<u>ab150081</u>) at 1/2000 dilution for 30 min at 4°C. Unlabelled sample (blue line) was also used as a control. Acquisition of >30,000 total events were collected.

Negative control: Jurkat cells.

Flow Cytometry - Anti-VEGF Receptor 2 antibody [EPR21231] (ab234110)



Immunocytochemistry/ Immunofluorescence - Anti-VEGF Receptor 2 antibody [EPR21231] (ab234110)



Anti-VEGF Receptor 2 antibody [EPR21231] (ab234110) ab234110 staining VEGFR2 in HUVEC cells. The cells were fixed with 10% paraformaldeyde (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 ab234110 at 5ugml then detected with an Alexa Fluor<sup>®</sup> 488 goat antirabbit secondary antibody (<u>ab150081</u>) at a 1/1000 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue), and <u>ab195889</u>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 594), at a 1/250 dilution (shown in red).

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