


Product datasheet

Anti-VEGF Receptor 2 (phospho Y1054 + Y1059) antibody ab5473

★★★★★ [10 Abreviews](#) [36 References](#) [2 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-VEGF Receptor 2 (phospho Y1054 + Y1059) antibody |
| Description | Rabbit polyclonal to VEGF Receptor 2 (phospho Y1054 + Y1059) |
| Host species | Rabbit |
| Tested applications | Suitable for: ICC, WB |
| Species reactivity | Reacts with: Human Predicted to work with: Mouse, Rat  |
| Immunogen | Synthetic peptide corresponding to Human VEGF Receptor 2 (phospho Y1054 + Y1059). |
| Positive control | ICC: VEGF treated HUVEC whole cells. WB: VEGF treated HUVEC, MDA-MB-231 and MCF7 whole cell extract. |
| 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 | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA, 50% Glycerol |
| Purity | Immunogen affinity purified |
| Purification notes | The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated VEGFR 2. The final product is generated by affinity chromatography using a VEGFR 2 derived peptide that |

is phosphorylated at Tyrosines 1054 and 1059.

Clonality

Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab5473 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 | | 1/250. |
| WB | ★★★★★ (1) | 1/1000. Detects a band of approximately 150 kDa. |

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 Ig-like C2-type (immunoglobulin-like) domains.
Contains 1 protein kinase domain.

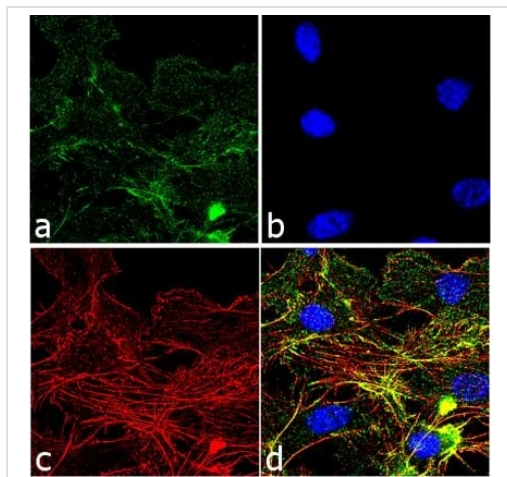
Post-translational modifications

Phosphorylated. Dephosphorylated by PTPRB. Dephosphorylated by PTPRJ at Tyr-951, Tyr-996, Tyr-1054, Tyr-1059, Tyr-1175 and Tyr-1214.

Cellular localization

Membrane.

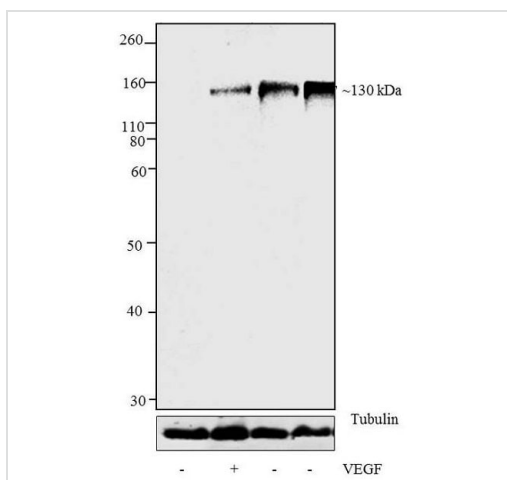
Images



Immunocytochemistry - Anti-VEGF Receptor 2
(phospho Y1054 + Y1059) antibody (ab5473)

Immunofluorescence analysis of HUVEC cells labelling VEGF Receptor 2 (phospho Y1054 + Y1059) (Panel a: green) using ab5473 at 2 ug/ml in 0.1% BSA for 3 hours at room temperature, followed by Alexa Fluor® 488-conjugated Goat anti-rabbit IgG polyclonal at 1/2000 dilution. Panel b: Nuclei stained with DAPI (blue), Panel c: F-actin stained with Alexa Fluor® 555 Rhodamine Phalloidin (red), Panel d: Merged images. The images were captured at 60X magnification.

Prior antibody incubation, HUVEC (Human umbilical vein endothelial cell line) cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes and blocked with 1% BSA for 1 hour at room temperature, followed by treatment with 100 ng of VEGF for 30 minutes. Assay was done on 90% confluent log phase HUVEC cells.



Western blot - Anti-VEGF Receptor 2 (phospho
Y1054 + Y1059) antibody (ab5473)

All lanes : Anti-VEGF Receptor 2 (phospho Y1054 + Y1059) antibody (ab5473) at 1/1000 dilution

Lane 1 : HUVEC (Human umbilical vein endothelial cell line) whole cell extract with Skimmed milk

Lane 2 : HUVEC cells treated with 25ng/ml VEGF for 5 minutes with Skimmed milk

Lane 3 : MDA-MB-231 (human breast adenocarcinoma cell line) whole cell extract with Skimmed milk

Lane 4 : MCF7 (human breast adenocarcinoma cell line) whole cell extract with Skimmed milk

Lysates/proteins at 30 µg per lane.

Blocking peptides at 5 % per lane.

Secondary

All lanes : Goat anti-rabbit IgG HRP conjugate at 1/5000 dilution

A 150 kDa band corresponding to VEGFR (pYpY1054/1059) was

observed across cell lines tested.

Protein samples were electrophoresed using Novex® NuPAGE® 10 % Bis-Tris gel, XCell SureLock™ Electrophoresis System and Novex® Sharp Pre-Stained Protein Standard.

Resolved proteins were then transferred onto a nitrocellulose membrane by over night wet transfer.

Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate.

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

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