abcam

Product datasheet

Anti-VEGF Receptor 2 antibody ab39638

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Overview

Product name Anti-VEGF Receptor 2 antibody

Description Rabbit polyclonal to VEGF Receptor 2

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB, IHC-P

Species reactivity Reacts with: Rat, Human

Predicted to work with: Mouse

Immunogen The antiserum was produced against synthesized non-phosphopeptide derived from human

VEGF Receptor 2 around the phosphorylation site of tyrosine 951.

Positive control WB: SK-OV3 cell lysate. IHC-P: Human brain tissue and stomach cancer tissue; Rat spinal cord

tissue. ICC/IF: HepG2 cells.

General notes

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.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

Without Mg2+ and Ca2+

Purity Immunogen affinity purified

Purification notes This antibody was affinity purified from rabbit antiserum by affinity chromatography using epitope

specific immunogen.

Clonality Polyclonal

1

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab39638 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	★★★★ <u>(1)</u>	Use a concentration of 1 µg/ml.
WB	★★★★★ (1)	1/500 - 1/1000. Predicted molecular weight: 151 kDa.
IHC-P	*** <u>*</u>	1/50 - 1/100.

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.

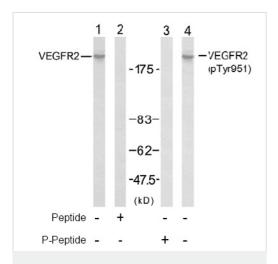
Post-translational modifications

Phosphorylated. Dephosphorylated by PTPRB. Dephosphorylated by PTPRJ at Tyr-951, Tyr-996,

Tyr-1054, Tyr-1059, Tyr-1175 and Tyr-1214.

Cellular localization Membrane.

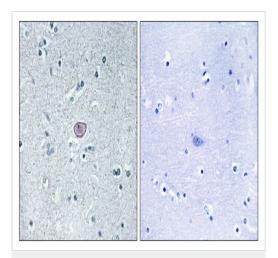
Images



Western blot - Anti-VEGF Receptor 2 antibody (ab39638)

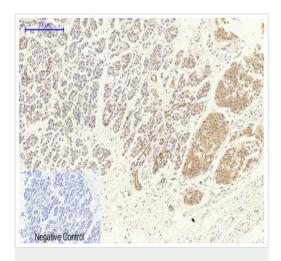
Western blot analysis of extracts from SK-OV3 cells using VEGF Receptor 2 antibody ab39638 (Lane 1 and 2) and VEGF Receptor 2 (phospho-Tyr951) antibody (Lane 3 and 4).

Secondary antibody - anti-rabbit HRP (ab6721)



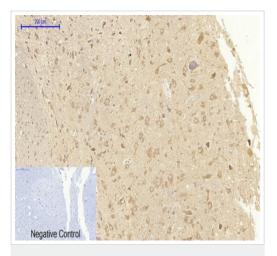
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VEGF Receptor 2 antibody (ab39638)

Immunohistochemical analysis of human brain tissue stained with ab39638. The image on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of human stomach cancer tissue stained with ab39638 at 1/200 dilution at 4° C overnight. The negative control was secondary antibody only.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VEGF Receptor 2 antibody (ab39638)

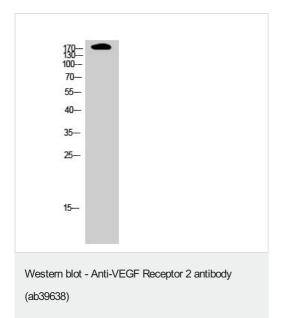


Immunohistochemical analysis of rat spinal cord tissue stained with ab39638 at 1/200 dilution at 4°C overnight. The negative control was secondary antibody only.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VEGF Receptor 2 antibody (ab39638)

Immunocytochemistry/ Immunofluorescence - Anti-VEGF Receptor 2 antibody (ab39638) ICC/IF image of ab39638 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab39638, 1 μ g/ml) overnight at +4°C. The secondary antibody

(green) was Alexa Fluor® 488 goat anti-rabbit $\lg G$ (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 μ M.



Anti-VEGF Receptor 2 antibody (ab39638) (Anti-VEGF Receptor 2 antibody) + HeLa cell lysate

Predicted band size: 151 kDa

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

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