

Product datasheet

Anti-VEGF Receptor 2 antibody ab2349

★★★★★ 11 Abreviews 71 References 5 Images

Overview

Product name	Anti-VEGF Receptor 2 antibody
Description	Rabbit polyclonal to VEGF Receptor 2
Host species	Rabbit
Tested applications	Suitable for: IP, IHC-P, IHC-Fr, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Cow, Dog, Human
Immunogen	Synthetic peptide: KMVDAAVHADSGTTLQLTSC , corresponding to C terminal amino acids 1326-1345 of Mouse VEGF Receptor 2. Run BLAST with Run BLAST with
Positive control	Angiosarcoma.
General notes	Isoform 1 localization: Cell membrane; Single-pass type I membrane protein. Cytoplasm. Nucleus. Cytoplasmic vesicle. Early endosome. Note: Detected on caveolae-enriched lipid rafts at the cell surface. Is recycled from the plasma membrane to endosomes and back again. Phosphorylation triggered by VEGFA binding promotes internalization and subsequent degradation. VEGFA binding triggers internalization and translocation to the nucleus.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 1% BSA
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab2349** 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
IP		1/100.
IHC-P	★★★★☆	1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IHC-Fr		1/50 - 1/100.
ICC/IF	★★★★☆	Use at an assay dependent concentration. See Abreview.
Flow Cyt		Use at an assay dependent concentration. PubMed: 18602918 ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

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.

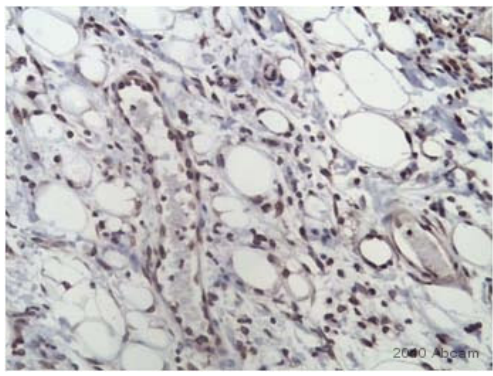
Post-translational modifications

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

Cellular localization

Membrane.

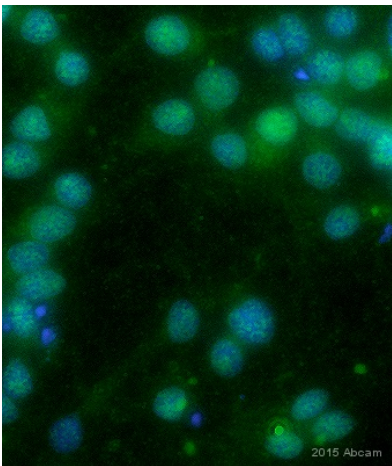
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VEGF Receptor 2 antibody (ab2349)

This image is courtesy of an Abreview submitted by Manoj Kumar Valluru

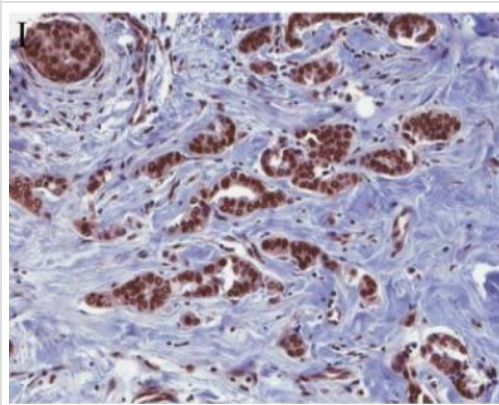
ab2349 staining the VEGF Receptor 2 in Mouse skin tissue sections by Immunohistochemistry (IHC-P - formaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 10% serum for 1 hour at room temperature; antigen retrieval was by heat mediation in citrate buffer (pH 6). Samples were incubated with primary antibody (1/100 in PBS + 2% blocking serum) for 16 hours at 4°C. A biotin-conjugated Goat anti-rabbit IgG polyclonal (1/250) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-VEGF Receptor 2 antibody (ab2349)

This image is courtesy of an anonymous abreview.

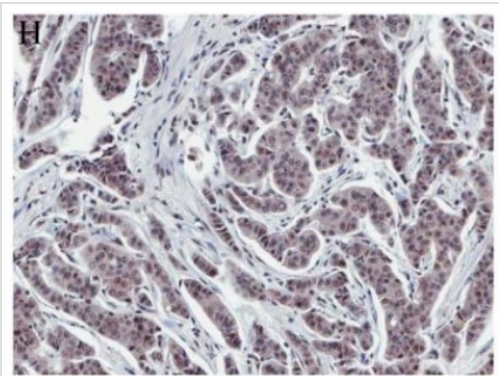
Immunocytochemistry/ Immunofluorescence analysis of human cardiomyocytes labeling VEGF Receptor 2 with ab2349 at 1/400 dilution. Cells were fixed with acetone and blocked with 5% serum for 1 hour at 25°C. Cells were incubated with ab2349 at 1/400 for 24 hours at 4°C in 10% FBS. A polyclonal goat anti-rabbit IgG Alexa Fluor® 488 conjugate was used as the secondary antibody at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VEGF Receptor 2 antibody (ab2349)

Image from Arias-Pulido, Hugo et al., *BMC Cancer* 12 (2012): 298. PMC. Web. 25 Jan. 2017. doi: 10.1186/1471-2407-12-298. Fig 1I.

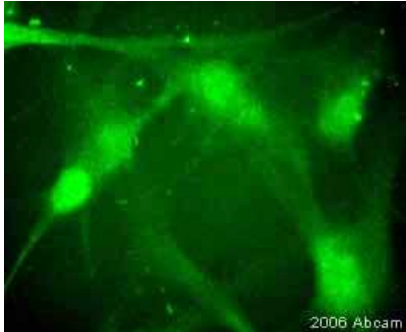
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human normal breast tissue labeling VEGF Receptor 2 with ab2349 at 1/200 dilution. Sections were lightly counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VEGF Receptor 2 antibody (ab2349)

Image from Arias-Pulido, Hugo et al., *BMC Cancer* 12 (2012): 298. PMC. Web. 25 Jan. 2017. doi: 10.1186/1471-2407-12-298. Fig 1H.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human normal breast tissue labeling VEGF Receptor 2 with ab2349 at 1/200 dilution. Sections were lightly counterstained with hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-VEGF Receptor 2 antibody (ab2349)

ab2349 at a 1/100 dilution staining Human choroidal endothelial cells by Immunocytochemistry. The antibody was incubated with the cells for 3 hours and then detected using an Alexa-Fluor 488® goat anti-rabbit (IgG).

This image is courtesy of an Abreview submitted on **27 February 2006**.

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