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Product datasheet

Anti-VEGF Receptor 2 antibody ab2349

16 Abreviews 128 References 4 Images

Overview

Product name	Anti-VEGF Receptor 2 antibody
Description	Rabbit polyclonal to VEGF Receptor 2
Host species	Rabbit
Tested applications	**Suitable for:** IHC-Fr, IHC-P, ICC/IF, Flow Cyt, IP
Species reactivity	**Reacts with:** Mouse, Rat, Cow, Dog, Human
Immunogen	Synthetic peptide corresponding to Mouse VEGF Receptor 2 (C terminal).
Positive control	IHC-P: Human normal breast and angiosarcoma tissues; Mouse skin tissue.
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. 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. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.3 Preservative: 0.05% Sodium azide Constituent: 1% BSA
Purity	Protein A purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab2349 in the following tested applications.

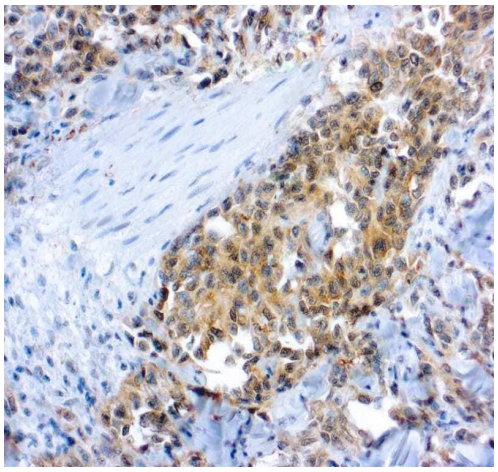
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		Use at an assay dependent concentration.
IHC-P	★★★★☆ (7)	1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★☆ (8)	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.
IP		Use at an assay dependent concentration.

Target

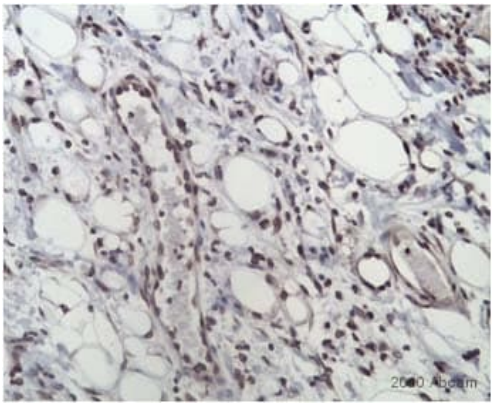
Function	Receptor for VEGF or VEGFC. Has a tyrosine-protein kinase activity. The VEGF-kinase ligand/receptor signaling system plays a key role in vascular development and regulation of vascular permeability. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance 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)

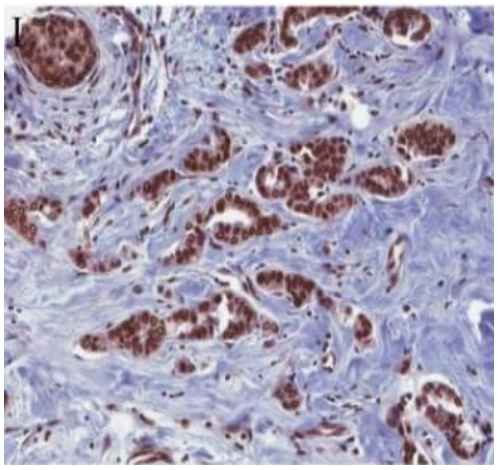
Formalin fixed, paraffin-embedded human angiosarcoma tissue stained for VEGF Receptor 2 using ab2349 at 1/50 dilution in immunohistochemical analysis.



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

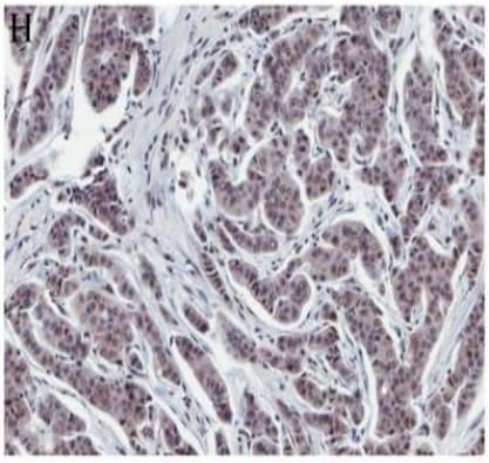
ab2349 staining the VEGF Receptor 2 in Mouse skin tissue sections by Immunohistochemistry (IHC-P - formaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 10% serum for 1 hour at room temperature; antigen retrieval was by heat mediation in citrate buffer (pH 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.



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. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/2.0/.

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. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/2.0

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.

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