

Rabbit anti-Human VEGFR2 (FLK1/KDR) Polyclonal Antibody | anti-KDR antibody

VEGFR2 (FLK1/KDR) Antibody (C-term)

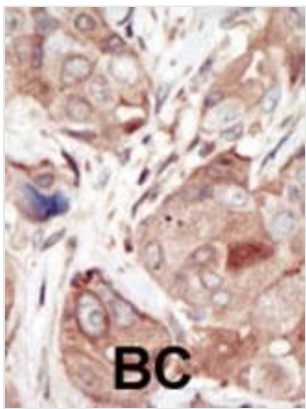
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284301	Rabbit	Human	Immunohistochemistry, Flow Cytometry, Functional Assay, Immunofluorescence, ELISA, Western Blot

PRODUCT SYNONYMS

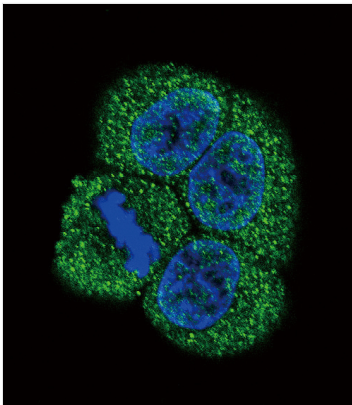
VEGFR2 (FLK1/KDR); Polyclonal Antibody; VEGFR2 (FLK1/KDR) Antibody (C-term); Vascular endothelial growth factor receptor 2; VEGFR-2; Fetal liver kinase 1; FLK-1; Kinase insert domain receptor; KDR; Protein-tyrosine kinase receptor flk-1; CD309; FLK1; VEGFR2; anti-KDR antibody

PRODUCT SPECIFICATIONS

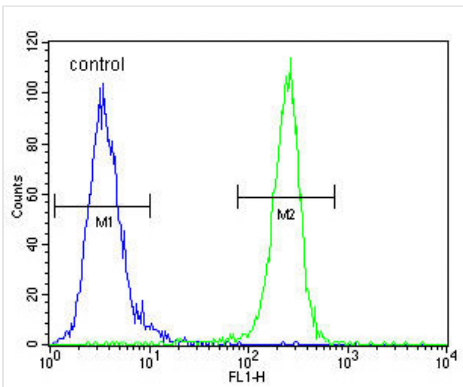
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This VEGFR2 (FLK1/KDR) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1326-1356 amino acids from the C-terminal region of human VEGFR2 (FLK1/KDR).
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 1.27 (varies by lot)
Sequence Positions	1326-1356
Sequence Length	712
Applicable Applications for anti-KDR antibody	IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



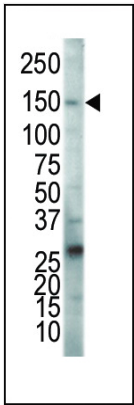
IHC (Immunohistochemistry)
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



IF (Immunofluorescence)
Confocal immunofluorescent analysis of VEGFR2 (FLK1/KDR) Antibody (C-term) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



FCM/FACS (Flow Cytometry)
VEGFR2 (FLK1/KDR) Antibody (C-term) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



WB (Western Blot)
Western blot analysis of anti-KDR/FLK1 Pab in HeLa cell lysate. KDR (VEGFR2) (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

ADDITIONAL INFORMATION

Related Product Information for anti-KDR antibody	KDR (FLK1) is a receptor for VEGF or VEGFC. This protein 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. Function: Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFC and VEGFD. Plays an essential role in the regulation of angiogenesis, vascular development, vascular permeability, and embryonic hematopoiesis. Promotes proliferation, survival, migration and differentiation of endothelial cells. Promotes reorganization of the actin cytoskeleton. Isoforms lacking a transmembrane domain, such as isoform 2 and isoform 3, may function as decoy receptors for VEGFA, VEGFC and/or VEGFD. Isoform 2 plays an important role as negative regulator of VEGFA- and VEGFC-mediated lymphangiogenesis by limiting the amount of free VEGFA and/or VEGFC and preventing their binding to FLT4. Modulates FLT1 and FLT4 signaling by forming heterodimers. Binding of vascular growth factors to isoform 1 leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate and the activation of protein kinase C. Mediates activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, reorganization of the actin cytoskeleton and activation of PTK2/FAK1. Required for VEGFA-mediated induction of NOS2 and NOS3, leading to the production of the signaling molecule nitric oxide (NO) by endothelial cells. Phosphorylates PLCG1. Promotes phosphorylation of FYN, NCK1, NOS3, PIK3R1, PTK2/FAK1 and SRC.
Product Categories/Family for anti-KDR antibody	Cancer; Cardiovascular; Immunology; Metabolism; Neuroscience; Signal Transduction

References	Yilmaz, A., et al., Biochem. Biophys. Res. Commun. 306(3):730-736 (2003). Zeng, H., et al., J. Biol. Chem. 278(23):20738-20745 (2003). Kiba, A., et al., J. Biol. Chem. 278(15):13453-13461 (2003). Elvert, G., et al., J. Biol. Chem. 278(9):7520-7530 (2003). Yang, S., et al., Arterioscler. Thromb. Vasc. Biol. 22(11):1797-1803 (2002).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	11321597
NCBI GeneID	3791
NCBI Accession #	NP_002244.1
NCBI GenBank Nucleotide #	NM_002253.2
UniProt Accession #	P35968; O60723; Q14178; A2RRS0; B5A925; C5IFA0
Molecular Weight	151527
NCBI Official Full Name	vascular endothelial growth factor receptor 2
NCBI Official Synonym Full Names	kinase insert domain receptor
NCBI Official Symbol	KDR
NCBI Official Synonym Symbols	FLK1; CD309; VEGFR; VEGFR2
NCBI Protein Information	vascular endothelial growth factor receptor 2
UniProt Protein Name	Vascular endothelial growth factor receptor 2
UniProt Gene Name	KDR
UniProt Synonym Gene Names	FLK1; VEGFR2; VEGFR-2; FLK-1; KDR
UniProt Entry Name	VGFR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/vegfr2-flk1-kdr-antibody-immunohistochemistry-flow-cytometry-immunofluorescence-western-blot-elisa/284301>