

Rabbit VEGF Receptor 2 Polyclonal Antibody | anti-VEGFR-2 antibody

Anti-VEGF Receptor 2 Picoband antibody

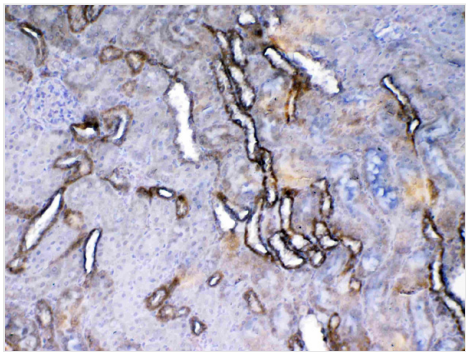
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124601	Rabbit	Mouse, Rat No cross reactivity with other proteins.	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

VEGF Receptor 2; Polyclonal Antibody; Anti-VEGF Receptor 2 Picoband antibody; Vascular endothelial growth factor receptor 2; Fetal liver kinase 1; FLK-1; Kinase NYK; Protein-tyrosine kinase receptor flk-1; CD309; Kdr; Flk-1; Flk1; anti-VEGFR-2 antibody

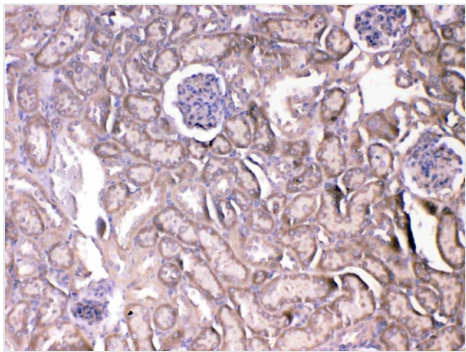
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	673
Applicable Applications for anti-VEGFR-2 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Immunogen	E Coli-derived mouse VEGF Receptor 2 recombinant protein (Position: A20-L244).
Subcellular Localization	Cell junction.
Tissue Specificity	Expressed in endothelial cells (at protein level). Detected in embryonic endothelial cells, as well as hematopoietic stem and progenitor cells. Detected in vascular endothelium. Expressed at high levels in adult heart, lung, kidney, brain and skeletal muscle, but is also expressed at lower levels in most other adult tissues.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ .
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



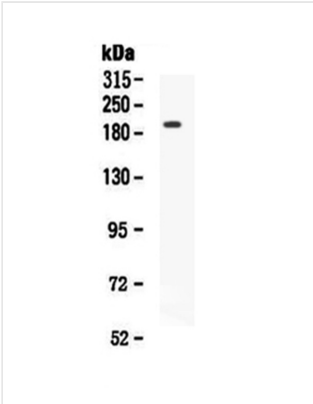
IHC (Immunohistochemisry)

Figure 3. IHC analysis of VEGF Receptor 2 using anti-VEGF Receptor 2 antibody (AAA124601). VEGF Receptor 2 was detected in paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VEGF Receptor 2 Antibody (AAA124601) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of VEGF Receptor 2 using anti-VEGF Receptor 2 antibody (AAA124601). VEGF Receptor 2 was detected in paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VEGF Receptor 2 Antibody (AAA124601) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of VEGF Receptor 2 using anti-VEGF Receptor 2 antibody (AAA124601). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: Recombinant mouse VEGFR2 Protein 1ng. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-VEGF Receptor 2 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for VEGF Receptor 2 at approximately 166-200KD. The expected band size for VEGF Receptor 2 is at 153KD.

ADDITIONAL INFORMATION

Related Product Information for anti-VEGFR-2 antibody	Description: KDR (Kinase Insert Domain Receptor), also known as FLK1, VEGFR or VEGFR2, is a VEGF receptor. KDR is the human gene encoding it. Vascular endothelial growth factor (VEGF) is the only mitogen that specifically acts on endothelial cells. Its expression is upregulated by hypoxia, and its cell-surface receptor, known as fetal liver kinase-1 (Flk1) in mouse, is exclusively expressed in endothelial cells. Flk1 is the mouse homolog of KDR. Protein 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, may function as decoy receptors for VEGFA, VEGFC and/or VEGFD. Isoform 2 plays an important role as a negative regulator of VEGFA- and VEGFC- mediated lymphangiogenesis by limiting the amount of free VEGFA and/or VEGFC and by 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-VEGFR-2 antibody	Cardiovascular; Angiogenesis; Growth Factors; VEGF; VEGF Receptors; Microbiology; Interspecies Interaction; Host Virus Interaction; Signal Transduction; Protein Phosphorylation; Tyrosine Kinases; Receptor Tyrosine Kinases; Growth Factors/Hormones; Stem Ce

NCBI AND UNIPROT INFORMATION

NCBI GI #	549321
NCBI GeneID	16542
UniProt Accession #	P35918; C5H7S5
Molecular Weight	75,230 Da
NCBI Official Full Name	Vascular endothelial growth factor receptor 2
NCBI Official Synonym Full Names	kinase insert domain protein receptor
NCBI Official Symbol	Kdr
NCBI Official Synonym Symbols	orv; Flk1; Ly73; Flk-1; Krd-1; VEGFR2; VEGFR-2; sVEGFR-2; 6130401C07
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	Flk-1; Flk1; VEGFR-2; FLK-1

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/vegfr-receptor-2-antibody-western-blot-immunohistochemistry-elisa/124601>