

**Anti-VEGFR2 (pY1054/Y1063) Antibody**  
**Catalog # AP54017****Specification**

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**Anti-VEGFR2 (pY1054/Y1063) Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P35968</a>
Other Accession	<a href="#">P35916</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	151527

**Anti-VEGFR2 (pY1054/Y1063) Antibody - Additional Information****Gene ID** 3791**Other Names**

KDR; FLK1; VEGFR2; 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; FLT4; VEGFR3; Vascular endothelial growth factor receptor 3; VEGFR-3; Fms-like tyrosine kinase 4; FLT-4; Tyrosine-protein kinase receptor FLT4

**Target/Specificity**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human VEGFR2/3 (pY1054/Y1063). The exact sequence is proprietary.

**Dilution**

WB~~1/500 - 1/1000  
IHC~~1:100~500

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C.Stable for 12 months from date of receipt

**Anti-VEGFR2 (pY1054/Y1063) Antibody - Protein Information****Name** KDR ([HGNC:6307](#))**Synonyms** FLK1, VEGFR2**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.

#### Cellular Location

Cell junction. Endoplasmic reticulum. Cell membrane. Note=Localized with RAP1A at cell-cell junctions (By similarity). Colocalizes with ERN1 and XBP1 in the endoplasmic reticulum in endothelial cells in a vascular endothelial growth factor (VEGF)-dependent manner (PubMed:23529610). {ECO:0000250, ECO:0000269|PubMed:23529610} [Isoform 2]: Secreted.

#### Tissue Location

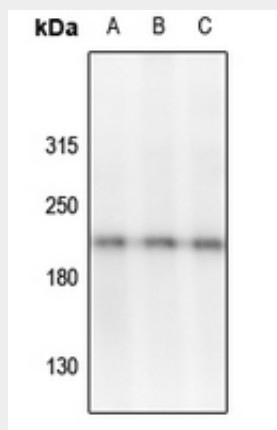
Detected in cornea (at protein level). Widely expressed.

### Anti-VEGFR2 (pY1054/Y1063) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

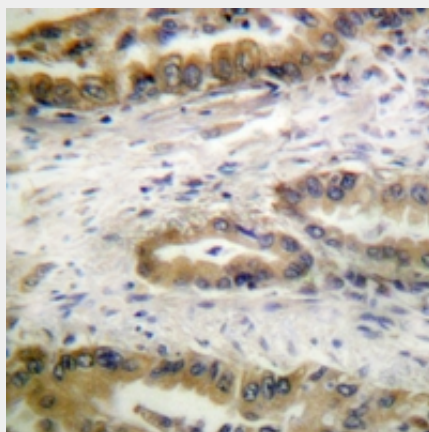
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-VEGFR2 (pY1054/Y1063) Antibody - Images



Western blot analysis of VEGFR2 (pY1054/Y1063) expression in AML12 (A), PMVEC (B), rat brain

(C) whole cell lysates.



Immunohistochemical analysis of VEGFR2 (pY1054/Y1063) staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-VEGFR2 (pY1054/Y1063) Antibody - Background**

Rabbit polyclonal antibody to VEGFR2 (pY1054/Y1063)