

# VEGF Receptor 1 Rabbit mAb [2KK5]

Cat NO. :A22236

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC	H,M,R,Chinese	P17948	180 kDa	Rabbit	IgG	100ul,200ul
	hamster					

Applications detail:

Application

**Dilution** 1:1000-2000

WB

1:100

The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

**Purification**:

Protein A purification

## Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human VEGF Receptor 1

### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

### Tissue specificity:

Detected in normal lung, but also in placenta, liver, kidney, heart and brain tissues. Specifically expressed in most of the vascular endothelial cells, and also expressed in peripheral blood

## Subcellular location:

[Isoform 1]: Cell membrane, Single-pass type I membrane protein. Endosome.

### Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/

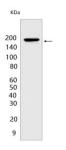
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFA, VEGFB and PGF, and plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. Acts as a positive regulator of postnatal retinal hyaloid vessel regression (Ref.11). May play an essential role as a negative regulator of embryonic angiogenesis by inhibiting excessive proliferation of endothelial cells. Can promote endothelial cell proliferation, survival and angiogenesis in adulthood. Its function in promoting cell proliferation seems to be cell-type specific. Promotes PGF-mediated proliferation of endothelial cells, proliferation of some types of cancer cells, but does not promote proliferation of normal fibroblasts (in vitro). Has very high affinity for VEGFA and relatively low protein kinase activity, may function as a negative regulator of VEGFA signaling by limiting the amount of free VEGFA and preventing its binding to KDR. Modulates KDR signaling by forming heterodimers with KDR. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate and the activation of protein kinase C. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, leading to activation of phosphatidylinositol kinase and the downstream signaling pathway. Mediates activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Phosphorylates SRC and YES1, and may also phosphorylate CBL. Promotes phosphorylation of AKT1 at 'Ser-473'. Promotes phosphorylation of PTK2/FAK1 (PubMed:16685275).., [Isoform 1]: Phosphorylates PLCG.., [Isoform 2]: May function as decoy receptor for VEGFA.., [Isoform 3]: May function as decoy receptor for VEGFA.., [Isoform 4]: May function as decoy receptor for VEGFA.., [Isoform 7]: Has a truncated kinase domain, it increases phosphorylation of SRC at 'Tyr-418' by unknown means and promotes tumor cell invasion..

### **Validation Data:**

#### VEGF Receptor 1 Rabbit mAb [2KK5] Images



Western blot (SDS PAGE) analysis of extracts from mouse brain .Using VEGF Receptor 1Rabbit mAb [2KK5] at dilution of 1:1000 incubated at  $4^{\circ}$ C over night.

View more information on http://naturebios.com

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.