Flk-1/VEGFR2 (phospho Tyr1214) Polyclonal Antibody

Catalog No :	YP0111
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Flk-1/VEGFR2
Fields :	>>EGFR tyrosine kinase inhibitor resistance;>>MAPK signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>Calcium signaling pathway;>>PI3K-Akt signaling pathway;>>VEGF signaling pathway;>>Focal adhesion;>>Proteoglycans in cancer;>>Fluid shear stress and atherosclerosis
Gene Name :	KDR
Protein Name :	Vascular endothelial growth factor receptor 2
Human Gene Id :	3791
Human Swiss Prot No :	P35968
Mouse Swiss Prot No :	P35918
Rat Gene Id :	25589
Rat Swiss Prot No :	O08775
Immunogen :	The antiserum was produced against synthesized peptide derived from human VEGFR2 around the phosphorylation site of Tyr1214. AA range:1180-1229
Specificity :	Phospho-Flk-1 (Y1214) Polyclonal Antibody detects endogenous levels of Flk-1 protein only when phosphorylated at Y1214.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 152kD

Cell Pathway : Cytokine-cytokine receptor interaction;Endocytosis;VEGF;Focal adhesion;

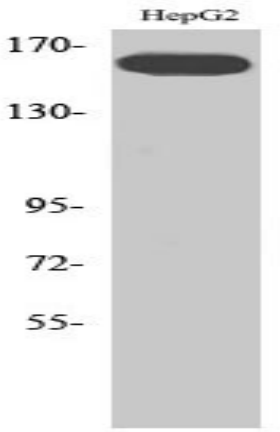
Background : Vascular endothelial growth factor (VEGF) is a major growth factor for endothelial cells. This gene encodes one of the two receptors of the VEGF. This receptor, known as kinase insert domain receptor, is a type III receptor tyrosine kinase. It functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. The signalling and trafficking of this receptor are regulated by multiple factors, including Rab GTPase, P2Y purine nucleotide receptor, integrin alphaVbeta3, T-cell protein tyrosine phosphatase, etc.. Mutations of this gene are implicated in infantile capillary hemangiomas. [provided by RefSeq, May 2009],

Function : catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,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.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 7 Ig-like C2-type (immunoglobulin-like) domains.,subunit:Interacts with MYOF (By similarity). Interacts with SHB; upon VEGF activation. Interacts with HIV-1 Tat.,

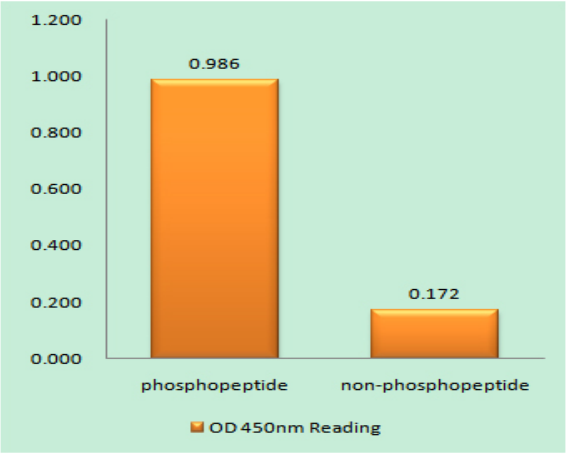
Subcellular Location : Cell junction . Endoplasmic reticulum . Cell membrane . Localized with RAP1A at cell-cell junctions (By similarity). Colocalizes with ERN1 and XBP1 in the endoplasmic reticulum in endothelial cells in a vascular endothelial growth factor (VEGF)-dependent manner (PubMed:23529610). .; [Isoform 1]: Cell membrane; Single-pass type I membrane protein. Cytoplasm. Nucleus. Cytoplasmic vesicle. Early endosome. 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.; [Isoform 2]: Secreted .; [Isoform 3]: Secreted.

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

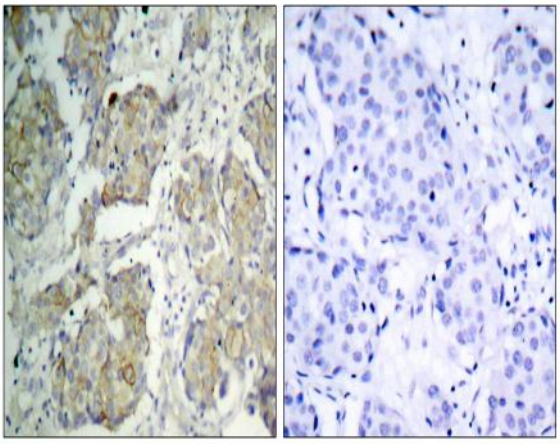
Products Images



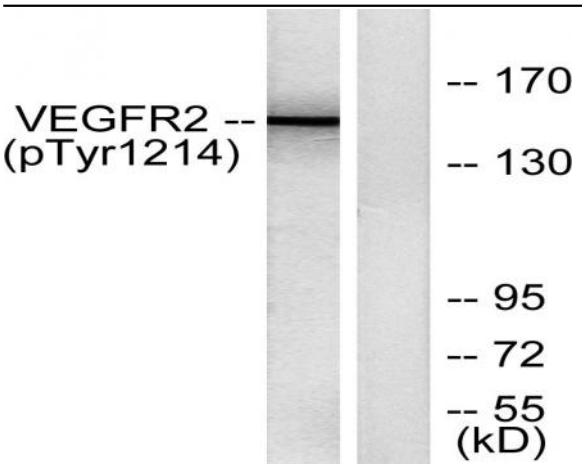
Western Blot analysis of various cells using Phospho-Flk-1 (Y1214) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using VEGFR2 (Phospho-Tyr1214) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using VEGFR2 (Phospho-Tyr1214) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells treated with Na3VO4 0.3nM 40', using VEGFR2 (Phospho-Tyr1214) Antibody. The lane on the right is blocked with the phospho peptide.