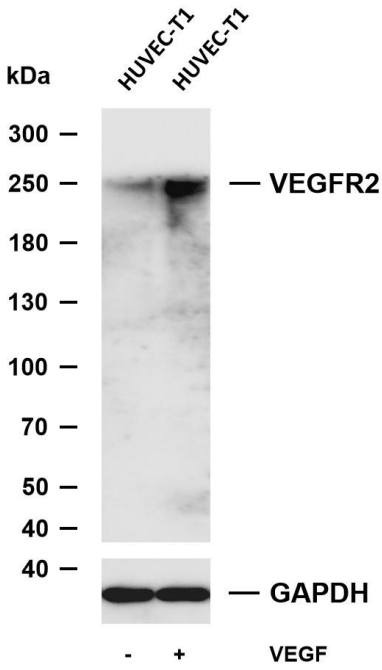
Flk-1/VEGFR2 (Phospho Tyr1175) Rabbit mAb

Catalog No	YP-rAb-18368
Isotype	IgG
Reactivity	Human,Mouse
Applications	WB,IF,ELISA
Gene Name	KDR FLK1 VEGFR2
Protein Name	Vascular endothelial growth factor receptor 2
Purification Process	Protein A
Specificity	VEGFR2 (Phospho Tyr1175) (Y1175) Monoclonal Antibody detects endogenous levels of Flk-1 protein only when phosphorylated at Y1175.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):KDyIV
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	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 ; CD antigen CD309
Observed Band	250kD
Calculated Molecular Weight	152kD
Cell Pathway	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.

Tissue Specificity	Detected in cornea (at protein level). Widely expressed.
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.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-VEGFR2 (Phospho Tyr1175) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HUVEC-T1 Lane 2: HUVEC-T1 was treated with VEGF(10ng/mL) for 5 minutes Predicted band size: 152kDa Observed band size: 250kDa