

Flt-1/VEGFR1 Polyclonal Antibody

Catalog No: YT1728

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: Flt-1

Fields: >>MAPK signaling pathway;>>Ras signaling pathway;>>Rap1 signaling

pathway;>>Calcium signaling pathway;>>HIF-1 signaling pathway;>>PI3K-Akt

signaling pathway;>>Focal adhesion;>>Transcriptional misregulation in

cancer;>>Rheumatoid arthritis

Gene Name: FLT1

Protein Name: Vascular endothelial growth factor receptor 1

Human Gene Id: 2321

Human Swiss Prot

No:

P17948

140.

Mouse Gene Id: 14254

Mouse Swiss Prot

No:

P35969

Rat Gene ld: 54251

Rat Swiss Prot No: P53767

Immunogen: The antiserum was produced against synthesized peptide derived from human

VEGFR1. AA range:1016-1065

Specificity: Flt-1 Polyclonal Antibody detects endogenous levels of Flt-1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

1/3



Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

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: 150kD

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

Background : This gene encodes a member of the vascular endothelial growth factor receptor

(VEGFR) family. VEGFR family members are receptor tyrosine kinases (RTKs) which contain an extracellular ligand-binding region with seven immunoglobulin (Ig)-like domains, a transmembrane segment, and a tyrosine kinase (TK) domain within the cytoplasmic domain. This protein binds to VEGFR-A, VEGFR-B and

placental growth factor and plays an important role in angiogenesis and

vasculogenesis. Expression of this receptor is found in vascular endothelial cells, placental trophoblast cells and peripheral blood monocytes. Multiple transcript variants encoding different isoforms have been found for this gene. Isoforms include a full-length transmembrane receptor isoform and shortened, soluble

isoforms. The soluble isoforms are associated with the onset of pre-

eclampsia.[provided by RefSeq, May 2009],

Function: alternative products:Additional isoforms seem to exist, catalytic activity:ATP + a

[protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,function:Receptor for VEGF, VEGFB and PGF. 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. Isoform SFlt1 may have an inhibitory role in angiogenesis.,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 lg-like C2-type (immunoglobulin-like) domains.,subunit:Interacts in vitro with various phosphotyrosine-binding proteins,

including PLC-gammas, PTPN11, GRB2, CRK and NCK1.,tissue

specificity: Mostly in normal lung, but also

Subcellular Location:

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Endosome. Autophosphorylation promotes ubiquitination and endocytosis.; [Isoform 2]: Secreted .; [Isoform 3]: Secreted .; [Isoform 4]: Secreted .; [Isoform 5]: Cytoplasm .;

[Isoform 6]: Cytoplasm .; [Isoform 7]: Cytoplasm .

Expression: 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 monocytes. Isoform 2 is strongly expressed in



placenta. Isoform 3 is expressed in corneal epithelial cells (at protein level). Isoform 3 is expressed in vascular smooth muscle cells (VSMC).

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