

**Flt-1/VEGFR1 Monoclonal Antibody**

<b>Catalog No :</b>	YM0278
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	Flt-1
<b>Fields :</b>	>>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
<b>Gene Name :</b>	FLT1
<b>Protein Name :</b>	Vascular endothelial growth factor receptor 1
<b>Human Gene Id :</b>	2321
<b>Human Swiss Prot No :</b>	P17948
<b>Mouse Swiss Prot No :</b>	P35969
<b>Immunogen :</b>	Purified recombinant extracellular fragment of human Flt-1 fused with hIgGFc tag expressed in HEK293 cells.
<b>Specificity :</b>	Flt-1 Monoclonal Antibody detects endogenous levels of Flt-1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

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**Molecularweight :** 151kD

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

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**P References :**  
1. Mol Med. 2006 Jul-Aug;12(7-8):127-36.  
2. Oncogene. 1997 May 29;14(21):2553-61

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**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],

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**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 Ig-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

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**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 .

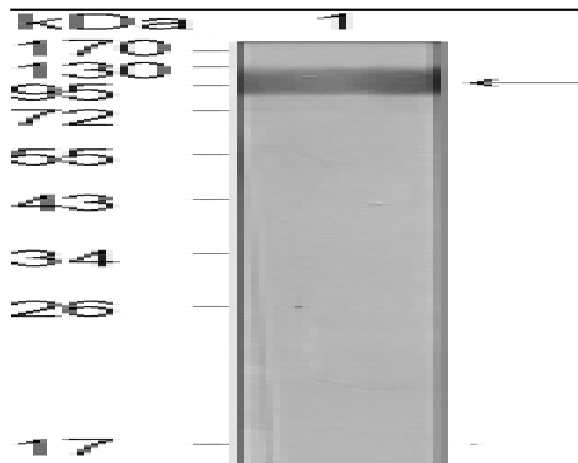
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**Expression :**

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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## Products Images



Western Blot analysis using Flt-1 Monoclonal Antibody against extracellular domain of human Flt-1.