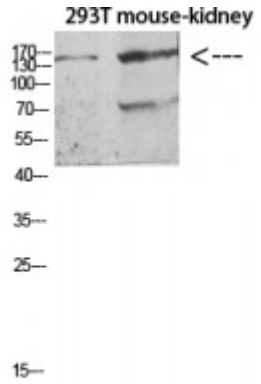
Anti-Flt-4 antibody



Description	Rabbit polyclonal to Flt-4.

Model	STJ98712
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthetic peptide from human Flt-4 protein.
Immunogen Region	640-700 aa
Gene ID	2324
Gene Symbol	FLT4
Dilution range	WB 1:500-2000IHC-P 1:50-300ELISA 1:5000-20000
Specificity	The antibody detects endogenous Flt-4.
Tissue Specificity	Detected in endothelial cells (at protein level). Widely expressed. Detected in fetal spleen, lung and brain. Detected in adult liver, muscle, thymus, placenta, lung, testis, ovary, prostate, heart, and kidney.
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Vascular endothelial growth factor receptor 3 VEGFR-3 Fms-like tyrosine kinase 4 FLT-4 Tyrosine-protein kinase receptor FLT4
Molecular Weight	170kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3767OMIM:136352
Alternative Names	Vascular endothelial growth factor receptor 3 VEGFR-3 Fms-like tyrosine kinase 4 FLT-4 Tyrosine-protein kinase receptor FLT4
Function	Tyrosine-protein kinase that acts as a cell-surface receptor for VEGFC and VEGFD, and plays an essential role in adult lymphangiogenesis and in the development of the vascular network and the cardiovascular system during embryonic development. Promotes proliferation, survival and migration of endothelial cells, and regulates angiogenic sprouting. Signaling by activated FLT4 leads to enhanced production of VEGFC, and to a lesser degree VEGFA, thereby creating a positive feedback loop that enhances FLT4 signaling. Modulates KDR signaling by forming heterodimers. The secreted isoform 3 may function as a decoy receptor for VEGFC and/or VEGFD and play an important role as a negative regulator of VEGFC-mediated lymphangiogenesis and angiogenesis. Binding of vascular growth factors to isoform 1 or isoform 2 leads to the activation of several signaling cascades; isoform 2 seems to be less efficient in signal transduction, because it has a truncated C-terminus and therefore lacks several phosphorylation sites. Mediates activation of the MAPK1/ERK2, MAPK3/ERK1 signaling pathway, of MAPK8 and the JUN signaling pathway, and of the AKT1 signaling pathway. Phosphorylates SHC1. Mediates phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Promotes phosphorylation of MAPK8 at 'Thr-183' and 'Tyr-185', and of AKT1 at 'Ser-473'.
Sequence and Domain Family	The first and second Ig-like C2-type (immunoglobulin-like) domains are sufficient for VEGFC binding.
Cellular Localization	Cell membrane. Single-pass type I membrane protein. Cytoplasm. Nucleus. Ligand-mediated autophosphorylation leads to rapid internalization.. Isoform 1: Cell membrane. Single-pass type I membrane protein. Ligand-mediated autophosphorylation leads to rapid internalization.. Isoform 2: Cell membrane. Single-pass type I membrane protein.. Isoform 3: Secreted. Cytoplasm.
Post-translational Modifications	Autophosphorylated on tyrosine residues upon ligand binding. Autophosphorylation occurs in trans, i.e. one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit. Phosphorylation in response to H(2)O(2) is mediated by a process that requires SRC and PRKCD activity. Phosphorylation at Tyr-1068 is required for autophosphorylation at additional tyrosine residues. Phosphorylation at Tyr-1063 and Tyr-1337 is important for interaction with CRK and subsequent activation of MAPK8. Phosphorylation at Tyr-1230, Tyr-1231 and Tyr-1337 is important for interaction with GRB2 and subsequent activation of the AKT1 and MAPK1/ERK2 and/or MAPK3/ERK1 signaling pathways. In response to endothelial cell adhesion onto collagen, can also be phosphorylated in the

absence of FLT4 kinase activity by SRC at Tyr-830, Tyr-833, Tyr-853, Tyr-1063, Tyr-1333, and Tyr-1337.