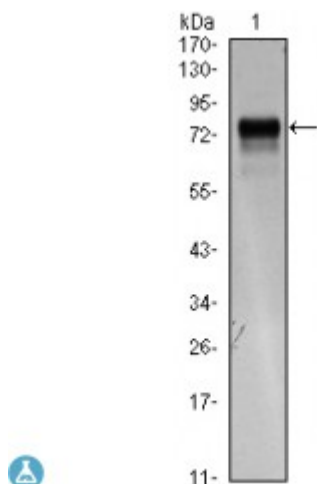


## Anti-Flt-4 antibody



<b>Description</b>	Mouse monoclonal to Flt-4.
<b>Model</b>	STJ98081
<b>Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Applications</b>	ELISA, WB
<b>Immunogen</b>	Purified recombinant fragment of human Flt-4 expressed in E. Coli.
<b>Gene ID</b>	<a href="#">2324</a>
<b>Gene Symbol</b>	<a href="#">FLT4</a>
<b>Dilution range</b>	WB 1:500-1:2000ELISA 1:10000
<b>Specificity</b>	Flt-4 Monoclonal Antibody detects endogenous levels of Flt-4 protein.
<b>Tissue Specificity</b>	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.
<b>Purification</b>	Affinity purification
<b>Clone ID</b>	4H4
<b>Note</b>	For Research Use Only (RUO).
<b>Protein Name</b>	Vascular endothelial growth factor receptor 3 VEGFR-3 Fms-like tyrosine kinase 4 FLT-4 Tyrosine-protein kinase receptor FLT4
<b>Clonality</b>	Monoclonal
<b>Conjugation</b>	Unconjugated

<b>Isotype</b>	IgG1
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide.
<b>Storage Instruction</b>	Store at -20°C, and avoid repeat freeze-thaw cycles.
<b>Database Links</b>	<a href="https://www.ncbi.nlm.nih.gov/clinvar/variation/37670">HGNC:37670</a> <a href="https://www.ebi.ac.uk/EMBL/BLAST/BLAST.cgi?from=protein&amp;to=protein&amp;from_id=136352&amp;to_id=136352">MIM:136352</a>
<b>Alternative Names</b>	Vascular endothelial growth factor receptor 3 VEGFR-3 Fms-like tyrosine kinase 4 FLT-4 Tyrosine-protein kinase receptor FLT4
<b>Function</b>	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'.
<b>Sequence and Domain Family</b>	The first and second Ig-like C2-type (immunoglobulin-like) domains are sufficient for VEGFC binding.
<b>Cellular Localization</b>	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.
<b>Post-translational Modifications</b>	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 <sub>2</sub> O <sub>2</sub> 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.

**T** +44 (0)208 223 3081

**E** [info@stjohnslabs.com](mailto:info@stjohnslabs.com)