

Recombinant Human FLT1, His-tagged

Cat. No. FLT1-31713TH Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant fragment of human VEGF Receptor 1 (aa 783-end) with an N-terminal His tag
Species	Human
ProteinLength	783-end a.a.
Description	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.
Conjugation	HIS
Tissue specificity	Mostly 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. It is not expressed in tumor cell lines. Isoform sFlt1

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Biological activity	Specific Activity: 170 U/mg. One unit is defined as the amount of enzyme that will transfer 1nmol phosphate to the tyrosine substrate per minute at pH 7.4 and 30C. Assay buffer: 50 mM HEPES, pH 7.4, 3 mM MgCl ₂ , 3 mM MnCl ₂ , 1 mM DTT, 3 uM Na-orthovanadate,
Form	Liquid
Storage buffer	Preservative: None Constituents: 50% Glycerol, 0.05% Tween 20, 3mM DTT, 25mM Tris HCl, 100mM Sodium chloride, pH 8
Storage	Aliquot and store at -80°C. Avoid repeated freeze / thaw cycles.
Sequence Similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.Contains 7 Ig-like C2-type (immunoglobulin-like) domains.Contains 1 protein kinase domain.

GENE INFORMATION

Gene Name	FLT1 fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor) [Homo sapiens]
Official Symbol	FLT1
Synonyms	FLT1; fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor); FLT; vascular endothelial growth factor receptor 1; VEGFR1;
Gene ID	2321
mRNA Refseq	NM_001159920

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Protein Refseq	NP_001153392
MIM	165070
Uniprot ID	P17948
Chromosome Location	13q12
Pathway	Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Endocytosis, organism-specific biosystem; Endocytosis, conserved biosystem; Focal Adhesion, organism-specific biosystem;
Function	ATP binding; growth factor binding; identical protein binding; nucleotide binding; protein binding;

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