

## Recombinant Human FLT1, His-tagged

Cat. No. FLT1-544H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human FLT1 was expressed by baculovirus in <i>Sf9 cells</i> using an N-terminal His tag. MW=67.5kDa.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>Description</b>	<p>FLT1, also known as fms-like tyrosine kinase 1, is a member of the VEGFR family and is related to the oncogene ROS. The tyrosine kinase activity of FLT1 has been shown to play a key role in control of cell proliferation and differentiation. FLT1 is a receptor for vascular endothelial growth factor (VEGF) and it has been observed that the ratio of FLT1 mRNA to VEGF mRNA correlates with tumor angiogenesis and prognosis in non-small cell lung cancers. In addition to the full-length receptor, FLT1 gene also encodes a soluble form of receptor due to alternative splicing. Both the full length and soluble form of FLT1 show strong binding affinity for VEGF.</p>
<b>Purity</b>	>70% by SDS-PAGE.
<b>Specific Activity</b>	170 U/mg. One unit is defined as the amount of enzyme that will transfer 1 nmol phosphate to the tyrosine substrate per minute at pH 7.4 and 30°C. Assay buffer: 50 mM HEPES, pH 7.4, 3 mM MgCl <sub>2</sub> , 3 mM MnCl <sub>2</sub> , 1 mM DTT, 3 uM Na-orthovanadate, 0.1 mM ATP, 30 ug/ml Poly (Glu:Tyr)4:1 substrate, and 2 ug /ml recombinant Flt1.
<b>Application</b>	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Formulated In** 25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 50% glycerol, and 3 mM DTT.

**Stability** >6 months at -80°C.

## GENE INFORMATION

**Gene Name** FLT1 fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor) [ Homo sapiens ]

**Synonyms** FLT1; fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor); FLT; VEGFR1; vascular endothelial growth factor receptor 1; EC 2.7.10.1; VEGFR-1; Vascular permeability factor receptor; Flt-1; Tyrosine-protein kinase receptor FLT; Tyrosine-protein kinase FRT; Fms-like tyrosine kinase 1; FRT

**Gene ID** [2321](#)

**mRNA Refseq** [NM\\_001159920](#)

**Protein Refseq** [NP\\_001153392](#)

**MIM** [165070](#)

**UniProt ID** [P17948](#)

**Chromosome Location** 13q12

**Pathway** Cytokine-cytokine receptor interaction; Endocytosis; Focal adhesion; Signaling by VEGF

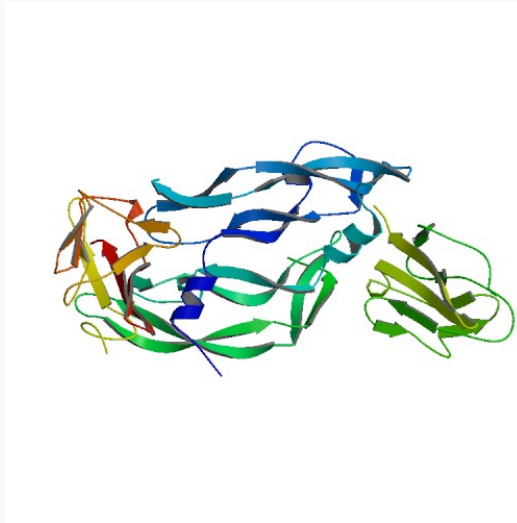
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**Function**

ATP binding; growth factor binding; identical protein binding; nucleotide binding; receptor activity; transferase activity; vascular endothelial growth factor receptor activity

**PDB rendering based on 1ft.**

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