

## Recombinant Human FLT3

Cat. No. FLT3-28342TH Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant fragment, corresponding to amino acids 571-993 of Human Flt3 / CD135 with an N terminal enzyme tag, and expressed by baculovirus in Sf9 insect cells.
<b>Species</b>	Human
<b>ProteinLength</b>	571-993 a.a.
<b>Description</b>	<p>This gene encodes a class III receptor tyrosine kinase that regulates hematopoiesis. The receptor consists of an extracellular domain composed of five immunoglobulin-like domains, one transmembrane region, and a cytoplasmic kinase domain split into two parts by a kinase-insert domain. The receptor is activated by binding of the fms-related tyrosine kinase 3 ligand to the extracellular domain, which induces homodimer formation in the plasma membrane leading to autophosphorylation of the receptor. The activated receptor kinase subsequently phosphorylates and activates multiple cytoplasmic effector molecules in pathways involved in apoptosis, proliferation, and differentiation of hematopoietic cells in bone marrow. Mutations that result in the constitutive activation of this receptor result in acute myeloid leukemia and acute lymphoblastic leukemia.</p>
<b>Tissue specificity</b>	Bone marrow cells.
<b>Biological activity</b>	Specific Activity: 70 nmol/min/mg
<b>Form</b>	Liquid

 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

<b>Storage buffer</b>	Preservative: None Constituents: 25% Glycerol, 50mM Tris HCl, 150mM Sodium chloride, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, pH 7.5
<b>Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
<b>Sequence Similarities</b>	Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 protein kinase domain.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">FLT3 fms-related tyrosine kinase 3 [ Homo sapiens ]</a>
<b>Official Symbol</b>	<a href="#">FLT3</a>
<b>Synonyms</b>	FLT3; fms-related tyrosine kinase 3; receptor-type tyrosine-protein kinase FLT3; CD135; FLK2; STK1;
<b>Gene ID</b>	<a href="#">2322</a>
<b>mRNA Refseq</b>	<a href="#">NM_004119</a>
<b>Protein Refseq</b>	<a href="#">NP_004110</a>
<b>MIM</b>	<a href="#">136351</a>
<b>Uniprot ID</b>	<a href="#">P36888</a>
<b>Chromosome Location</b>	13q12

 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



**Pathway**

Acute myeloid leukemia, organism-specific biosystem; Acute myeloid leukemia, conserved biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Hematopoietic cell lineage, organism-specific biosystem;

**Function**

ATP binding; cytokine receptor activity; nucleotide binding; phosphatidylinositol 3-kinase binding; protein homodimerization activity;

 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