

Recombinant Human FLT3, GST-tagged

Cat. No. FLT3-12937H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human FLT3 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
Species	Human
Source	E.coli
ProteinLength	27-376a.a.
Description	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.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH8.) added with 100mM

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GSH and 1% Triton X-100,15%glycerol.

GENE INFORMATION

Gene Name [FLT3 fms-related tyrosine kinase 3 \[Homo sapiens \]](#)

Official Symbol FLT3

Synonyms FLT3; fms-related tyrosine kinase 3; receptor-type tyrosine-protein kinase FLT3; CD135; FLK2; STK1; STK-1; CD135 antigen; FL cytokine receptor; fetal liver kinase 2; fms-like tyrosine kinase 3; stem cell tyrosine kinase 1; growth factor receptor tyrosine kinase type III; FLK-2;

Gene ID [2322](#)

mRNA Refseq [NM_004119](#)

Protein Refseq [NP_004110](#)

MIM [136351](#)

UniProt ID [P36888](#)

Chromosome Location 13q12

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; Hematopoietic cell lineage, conserved biosystem; Pathways in cancer, organism-specific biosystem;

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Function

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

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