Recombinant Human Fms-Related Tyrosine Kinase 3, His-tagged

Cat. No. FLT3-545H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human FLT3 was expressed by baculovirus in*Sf9 cells using*an N-terminal His tag. MW=54.2kDa.
Species	Human
Source	Sf9 Cells
Description	FLT3 is a receptor tyrosine kinase that has been shown to play a role in proliferation and survival of hematopoietic progenitor cells as well as differentiation of early B lymphoid progenitors. FLT3 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. FLT3 is the most frequently mutated gene in cases of acute myelogenous leukemia (AML). About 30 to 35% of patients have either internal tandem duplications (ITDs) in the juxtamembrane domain or mutations in the activating loop of FLT3. The consequence of either FLT3-ITD or activating loop mutations is the constitutive activation of the tyrosine kinase activity.
Purity	>80%.
Specific Activity	18 pmol/min/μg. Assay condition: The enzyme reaction was carried out for 1h at room temperature in a buffer containing 50 mM HEPES (pH7.5), 10 mM MgCl2, 1 mM EDTA, 0.01% BRIJ-35 and 200 μM of ATP. Substrate : 2 μM Tyr peptide 2 from Invitrogen.

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Application	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.
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	FLT3 fms-related tyrosine kinase 3 [Homo sapiens]
Synonyms	FLT3; fms-related tyrosine kinase 3; FLK2; STK1; CD135; CD135 antigen; fetal liver kinase 2; FL cytokine receptor; tal liver kinase 2; stem cell tyrosine kinase 1; FLT3 receptor tyrosine kinase; tyrosine-protein kinase receptor FLT3; growth factor receptor tyrosine kinase type III; C 2.7.10.1; OTTHUMP00000042340; fetal liver kinase 2
Gene ID	2322
mRNA Refseq	NM_004119
Protein Refseq	NP_004110
MIM	136351
UniProt ID	P36888
Chromosome Location	13q12
Pathway	ute myeloid leukemia; Cytokine-cytokine receptor interaction; Hematopoietic cell

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	lineage; Pathways in cancer
Function	ATP binding; nucleotide binding; osphoinositide 3-kinase binding; protein binding; receptor activity; transferase activity; vascular endothelial growth factor receptor activity

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