

Bioactive

FLT3 (Human) Recombinant Protein

Catalog # P5713 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

□

Specification

Product Description	Human PDK3 (NP_004110.2, 546 a.a. - 993 a.a.) partial recombinant protein with GST tag expressed in Baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	77
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	98 % by SDS-PAGE/CBB staining.

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluoresce nce-labeled substrate and Mg (or Mn)/ATP. The phosphorylated and unphosphorylated substrates w ere separated and detected by LabChip™3000. Substrate : Srctide. ATP: 100 µM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — FLT3

Entrez GeneID	2322
Protein Accession#	NP_004110.2
Gene Name	FLT3
Gene Alias	CD135, FLK2, STK1
Gene Description	fms-related tyrosine kinase 3
Omim ID	136351 601626
Gene Ontology	Hyperlink

Gene Summary

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. [provided by RefSeq]

Other Designations

CD135 antigen|FL cytokine receptor|FLT3 receptor tyrosine kinase|OTTHUMP00000042340|fetal liver kinase 2|growth factor receptor tyrosine kinase type III|stem cell tyrosine kinase 1|tyrosine-protein kinase receptor FLT3

Pathway

- [Acute myeloid leukemia](#)
- [Cytokine-cytokine receptor interaction](#)
- [Hematopoietic cell lineage](#)
- [Pathways in cancer](#)

Disease

- [Acute Disease](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Chromosome Aberrations](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Down Syndrome](#)
- [Edema](#)
- [Fractures](#)
- [Genetic Predisposition to Disease](#)

- [Leukemia](#)
- [Leukocytosis](#)
- [Lymphoproliferative Disorders](#)
- [Myelodysplastic Syndromes](#)
- [Neoplasm](#)
- [Neovascularization](#)
- [Noonan Syndrome](#)
- [Osteoporosis](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Recurrence](#)
- [Tobacco Use Disorder](#)
- [Translocation](#)