



Human FLT3 peptide (DAG-P0471)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen 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. [provided by RefSeq, Jul 2008]
Specificity	Bone marrow cells.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	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.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

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

Official Symbol	FLT3
Synonyms	FLT3; fms-related tyrosine kinase 3; FLK2; STK1; CD135; FLK-2; receptor-type tyrosine-protein kinase FLT3; 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;
Entrez Gene ID	2322
mRNA Refseq	NM_004119.2
Protein Refseq	NP_004110.2
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; Transcriptional misregulation in cancer, organism-specific biosystem; Transcriptional misregulation in cancer, conser
Function	ATP binding; cytokine receptor activity; phosphatidylinositol 3-kinase binding; protein binding; protein homodimerization activity; transmembrane receptor protein tyrosine kinase activity; vascular endothelial growth factor-activated receptor activity;