

Recombinant FLT3 (571-993) protein

Catalog No: 81381, 81681

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.15 µg/µl

Source: Human

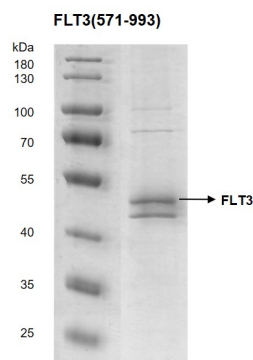
Buffer Contents: Recombinant FLT3 (571-993) protein is supplied in 25 mM HEPESNaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

Background: FLT3 (Fms Related Receptor Tyrosine Kinase 3) is a cell-surface receptor for the cytokine FLT3LG and regulates differentiation, proliferation and survival of hematopoietic progenitor cells and of dendritic cells. This 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. FLT3 promotes phosphorylation of SHC1 and AKT1, and activates the downstream effector MTOR and promotes activation of RAS signaling and phosphorylation of downstream kinases, including MAPK1/ERK2 and/or MAPK3/ERK1. Diseases associated with FLT3 include Leukemia, Acute Myeloid and Acute Myeloblastic Leukemia Without Maturation.

Protein Details: Recombinant FLT3 (571-993) protein that includes amino acids 571-993 of human FLT3 protein (accession number NP_004110.2) was expressed in a baculovirus expression system, and contains an N-terminal FLAG tag. The molecular weight of the protein is 49.7 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for this product is shown.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of arrival.

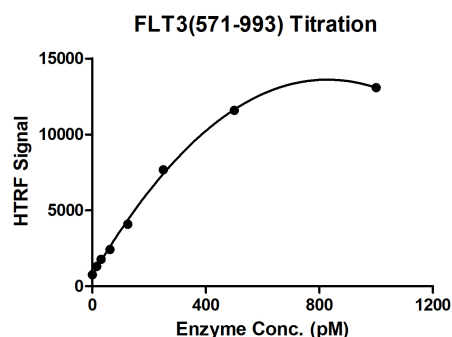


Recombinant FLT3 (571-993) protein

10% SDS-PAGE with Coomassie staining

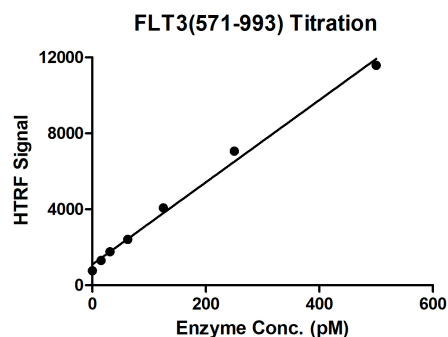
MW: 49.7 kDa

Purity: >50%



HTRF assay for FLT3 (571-993) activity

1 μ M TK substrate was incubated with different concentrations of FLT3 (571-993) protein in a 10 μ l reaction system containing 1 \times Enzymatic Buffer, 5 mM MgCl₂, 1mM MnCl, 1 mM DTT and 100 μ M ATP for 1 hour. Then 10 μ l detection reagents containing TK antibody (1:2) and SA-XL665 (1:100) diluted with 1 \times Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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