Flt3 N-Terminal HIS Tag. Sf9 cells Active Enzyme

Fms-related tyrosine kinase 3 ligand, Flt3 ligand, Flt3L

Background

Stimulates the proliferation of early hematopoietic cells. Synergizes well with a number of other colony stimulating factors and interleukins.

Description: Human Flt3 (GenBank Accession No. NM_004119), (a.a. 564-end) with N-terminal His tag, MW=54.2 kDa, expressed in a Baculovirus infected Sf9 cell expression system.

Ordering Information

Catalog Number
X1759E

Size
10 μg

Customer Storage
Product should be stored at -80°C. Aliquot to avoid freeze/thaw cycles

Formulation
25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 50% glycerol, and 3 mM DTT.

Ship Conditions
Ship on dry ice, freeze upon arrival

Stability
Products are stable for one year from purchase when stored properly

Concentration
See vial for concentration

Source
Human Flt3 (GenBank Accession No. NM_004119), (a.a. 564-end) with Nterminal His tag, MW=54.2 kDa, expressed in a Baculovirus infected Sf9 cell expression system.

Activity

Specific Activity: 225 pmol/min/μg. Assay condition: The enzyme reactionwas carried out for 1h at room temperature in a buffer containing 50 mM HEPES (pH7.5), 10 mM MgCl2, 1 mM EDTA, 0.01% BRIJ35 and 200 μM of ATP. Substrate: 2 μM Tyr peptide 2 from Invitrogen. Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Purity

>80%

Applications

Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Exalpha Biologicals, Inc. 2 Shaker Road, Bldg. B101 Shirley, MA 01464
Tel: 978.425.1370 www.exalpha.com info@exalpha.com

Assay Methods

Materials

Use Invitrogen Z'-Lyte kinase assay kit - Tyrosine 2 peptide

Procedure

1. Make 1X assay buffer.

2. Make substrate solution (1:250 dilution of the stock solution in 1X assay buffer containing 400 μM ATP). The final concentration is 2 μM for Tyr2 peptide substrate and 200 μM for ATP.

3. Make phosphorylated peptide substrate solution (1: 250 dilution of the stock in 1X assay buffer). The final concentration of phosphorylated Tyr 2 peptide substrate is 2 μM.

4. Dilute FLT3 to 0.2 ng /ul with 1X assay buffer, and transfer 25 μl to each well (5ng FLT3 per reaction). Add 25μl of 1X assay buffer to empty wells for a negative control and a positive control.

5. Add 25 μl substrate solution (from step 2) to the wells containing Flt3 and the designated negative control, and 25 ul of phosphorylated Tyr 2 peptide substrate (from step 3) to the designated positive well.

6. Incubate the reaction at room temperature for 1 hour.

7. Make a developer solution by diluting developer reagent A in developer dilution buffer (1:128 dilution).

References

1. Takahashi,S., et al., Leuk. Res. 29 (8), 893899 (2005)

2. Levis,M., et al., Blood 106 (2), 673-680 (2005).

Product Specific References