GFH21  
Recombinant Human FLT-3 Ligand

Description
Fms-related tyrosine kinase 3 ligand (FLT-3 Ligand) is a growth factor that regulates hematopoietic cell proliferation. FLT-3 Ligand signalling is transmitted through the fms-related tyrosine kinase 3 (FLT-3) receptor. FLT-3 Ligand promotes the long-term expansion and differentiation of pro-B cells in the presence of Interleukin-7 (IL-7) or in combination of IL-7 and Interleukin-3 (IL-3). Human FLT-3 Ligand is active on mouse cells.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>155 aa</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>17.6 kDa</td>
</tr>
<tr>
<td>Source</td>
<td>E. coli</td>
</tr>
<tr>
<td>Accession Number</td>
<td>P49771</td>
</tr>
<tr>
<td>Purity</td>
<td>≥95% determined by reducing and non-reducing SDS-PAGE</td>
</tr>
</tbody>
</table>

Specifications

Alternative Names: Flt3-L, Fms-related tyrosine kinase 3 ligand, Flt3 ligand, SL cytokine, FL, flt3L, FLT3L

Biological Activity:
Human FLT-3 Ligand is fully biologically active when compared to standard. The activity is determined by the proliferation of OCI-Aml5 cells and it is typically less than 10 ng/ml. This corresponds to an expected specific activity of 1 x 10^5 units/mg.

Endotoxin Level:
≤1.00 EU/μg as measured by kinetic LAL

Formulation:
Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5

AA Sequence:
MTQDCSFQHS PISSDFAVKI RELSDYLLQD YPVTVASNLQ DEELCGGLWR LVLAQRWMER LKTVAGSKMQ GLLLRVNIETI HPVTKCAFQP PFSCLRFVQT NISRLLQETS EQLVALKPWI TRQNFSRCLE QQQPSSTDLL PPPWSPRPLE ATAPT

Preparation and Storage

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Stability and Storage:
12 months from date of receipt when stored at -20°C to -80°C as supplied.
1 month when stored at 4°C after reconstituting as directed.
3 months when stored at -20°C to -80°C after reconstituting as directed.

Data

![Induced Proliferation of OCI-Aml5 Cells](image)

Induced proliferation of OCI-Aml5 cells assay for Human FLT-3 Ligand. Cell proliferation was measured to calculate the ED50, which is as expected less than 10 ng/ml.

Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human FLT-3 Ligand has a predicted Mw of 17.6 kDa.