

**BACKGROUND**

Flt3-Ligand is a growth factor important for the proliferation of hematopoietic cells. Flt3-Ligand binds to, and transmits signals through, the receptor tyrosine kinase known as FMS-like Tyrosine Kinase-3 (FLT-3). Flt3-Ligand promotes long-term expansion and differentiation of human pro-B-cells in the presence of IL-7 or in combination of IL-7 and IL-3. Human Flt3-Ligand can stimulate the proliferation of cells expressing murine FLT-3 receptors.

Recombinant human Flt3-Ligand is a non-glycosylated protein containing 155 amino acids and having a molecular mass of 17.6 kDa.

**Alternative Names:**

Flt3 L, Fms-related tyrosine kinase 3 ligand

**Amino Acid Sequence:**

TQDCSFQHSP ISSDFAVKIR ELSDYLLQDY PVTVASNLQD  
EELCGGLWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIH  
FVTKCAFQPP PSCLRFVQTN ISRLLQETSE QLVALKPWIT  
RQNFSRCLEL QCQPDSSTLP PPWSPRPLEA TAPTAA

**TECHNICAL INFORMATION**

**Source:** *E.coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

Recombinant human Flt3-Ligand is lyophilized with no additives.

**Stability:**

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term 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 a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

The activity is calculated by the dose-dependent stimulation of the proliferation of human AML5 cells is typically 0.6 - 1.0 ng/ml.

*Products are for research use only. They are not intended for human, animal, or diagnostic applications.*

