



## Recombinant Human Flt3 Ligand

20200401BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-026-SC</b>
Size:	50 µg
Lot. No.:	According to product label

### Scientific Background

<b>Gene-ID (NCBI):</b>	2323
<b>Synonyms:</b>	FLT3; FLK2; STK1; CD135; FLK-2

Flt3-Ligand is a growth factor that regulates proliferation of early hematopoietic cells. Flt3-Ligand binds to cells expressing the tyrosine kinase receptor Flt3. Flt3-Ligand, by itself does not stimulate proliferation of early hematopoietic cells, but synergizes with other CSFs and interleukins to induce growth and differentiation. Unlike SCF, Flt3-Ligand exerts no activity on mast cells. Multiple isoforms of Flt3-Ligand have been identified. The predominant biologically active form is anchored to the cell surface as the extracellular domain of a transmembrane protein (209 a.a.). The membrane-bound isoform can be proteolytically cleaved to generate a biologically active soluble isoform. Recombinant Human Flt3-Ligand is a soluble 17.6 kDa protein consisting of 155 amino acid residues.

### Sequence

TQDCSFQHSP ISSDFAVKIR ELSDYLLQDY PVTVASNLQD  
EELCGGLWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIH  
FVTKCAFQPP PSCLRFVQTN ISRLLOETSE QLVALKPWIT  
RQNFSRCLEL QCQPDSSSTLP PPWSPRPLEA TAPTA

### Database References

<b>Protein RefSeq:</b>	NP_001450.2
<b>Uniprot ID:</b>	P49771
<b>mRNA RefSeq:</b>	NM_001459.3

### Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 97% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	155
<b>MW:</b>	17.6 kDa

**Stability:** Lyophilized Flt3 Ligand although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Flt3 Ligand should be stored at 4°C between 2-7 days and for future use below -18°C.

**Reconstitution:** Reconstitute in sterile water to a concentration not less than 100 µg/ml. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Biological Activity:** Determined by the dose-dependent stimulation of the proliferation of human AML5 cells. The expected ED<sub>50</sub> for this effect is less than 1.0 ng/ml.