

## Recombinant Human Flt3-Ligand (rh Flt3L / CD135)

**Synonyms:** Fms- related tyrosine kinase 3 ligand, Stem Cell Tyrosine Kinase 1, STK1

**Introduction:** 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.

**Description:** Recombinant human Flt3-Ligand produced in E.Coli is a non-glycosylated, polypeptide chain containing 155 amino acids and having a molecular mass of 17.6 kDa. The rh Flt3-Ligand is purified by proprietary chromatographic techniques.

**Source:** Escherichia Coli.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** lyophilized from a 0.22 µm filtered solution in 50 mM Tris, 200 mM NaCl, pH 8.0. The aliquots of 1 µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh Flt3-Ligand in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh Flt3-Ligand although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rh Flt3-Ligand should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE / silver stain.

**Endotoxicity:** The endotoxin level is less than 1 EU/µg determined by LAL method

**Amino acid Sequence:** TQDCSFQHSP ISSDFAVKIR ELSDYLLQDY PVTVASNLQD EELCGGLWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIH FVTKCAFQPP PSCLRFVQTN ISRLLQETSE QLVALKPWIT RQNFSRCLEL QCQPDSSTLP PPWSPRPLEA TAPTA

**Biological Activity:** The ED50 range is 0.5 - 1.0 ng/ml measured by its ability to promote proliferation of Flt3-transfected murine 32D cells.

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<i>small</i>	2 µg	Cat.N°	11343302
<i>medium</i>	10 µg	Cat.N°	11343303
<i>large</i>	50 µg	Cat.N°	11343305
<i>x-large</i>	250 µg	Cat.N°	11343307
<i>xx-large</i>	1000 µg	Cat.N°	11343308

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