

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 PBS pH 7.4, lyophilized to 50 µg and 10 µg. 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 H₂O 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.

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.

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

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<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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