



Recombinant Human Flt3 Ligand

20200401BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-026S
Size:	2 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	2323
Synonyms:	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 PSCLRFBVQTN ISRLLOETSE QLVALKPWIT
RQNFSRCLEL QCQPDSSSTLP PPWSPRPLEA TAPTA

Database References

Protein RefSeq:	NP_001450.2
Uniprot ID:	P49771
mRNA RefSeq:	NM_001459.3

Product Specifications

Expressed in	E. coli
Purity	> 97% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	155
MW:	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 ED₅₀ for this effect is less than 1.0 ng/ml.