

DATASHEET

Version 20181206

Flt-3L, Human

Cat. No.: Z02926-1

Size: 1.0 mg

Synonyms: Flt3 ligand, FL, Flt3LG, SL cytokine
 Fms-related tyrosine kinase 3 ligand

Description:

Fms-related tyrosine kinase 3 ligand (Flt3L) is growth factor stimulates the proliferation and differentiation of hematopoietic multipotent progenitors and promotes proliferation of NK cells and dendritic cell subgroups by combination with other growth factors. Flt3L is produced by T cells and stromal fibroblasts, and targeted various cells including hematopoietic stem cells, B cells, T cells, dendritic cells, and NK cells [1][2]. Flt3L binds to its cognate tyrosine kinase receptor Flt3 and activates JAK/STAT signaling pathway [3].

Flt3L is a hematopoietic four helical bundle cytokine with structurally homologous to stem cell factor (SCF) and colony stimulating factor 1 (CSF-1) demonstrated four conserved cysteines and two glycosylation sites. Flt3L naturally as a non-disulfide-linked homodimer with multiple isoforms. The extracellular portion is approximately 160 amino acid residues in length and the cytoplasmic segment is approximately 20-30 amino acid residues in length [4].

Amino Acid Sequence:

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00001 TQDCSFQHP ISSDFAVKIR ELSDYLLQDY PVTVASNLQD
00041 EELCGGLWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIH
00081 FVTKCAFQPP PSCLRFVQTN ISRLQETSE QLVALKPWIT
00121 RQNFSCRLEL QCQPDSTLP PPWSRPLEA TAPTA
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Source: CHO

Species: Human

Biological Activity: ED₅₀ < 1 ng/ml, measured in a cell proliferation assay of human AML5 cells, corresponding to a specific activity of > 1 x 10⁶ units/mg

Molecular Weight: Multiple bands between 18-22 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level: <0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human Fms-related tyrosine kinase 3 ligand (Flt-3 Ligand) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhFlt-3L should be stable up to 1 week at 4°C or up to 2 months at -20°C.