

DATASHEET Version 20181206

## Flt-3L, Human

Cat. No.: Z02926-10

Size: 10.0 ug

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

## **Description:**

Fms-related tyrosine kinase 3 ligand (Flt3L) is growth fator 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 [<sup>1][2]</sup>. Flt3L binds to it cognate tyrosine kinase receptor Flt3 and activates JAK/STAT signaling pathway<sup>[3]</sup>.

Flt3L is a hematopoietic four helical bundle cytokine with structurally homologous to stem cell factor (SCF) and colony stimulating facor 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<sup>[4]</sup>.

## Amino Acid Sequence:

00001 TQDCSFQHSP ISSDFAVKIR ELSDYLLQDY PVTVASNLQD 00041 EELCGGLWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIH 00081 FVTKCAFQPP PSCLRFVQTN ISRLLQETSE QLVALKPWIT 00121 RQNFSRCLEL QCQPDSSTLP PPWSPRPLEA TAPTA

## Source: CHO

Species: Human

**Biological Activity**:  $ED_{50} < 1$  ng/ml, measured in a cell proliferation assay of human AML5 cells, corresponding to a specific activity of > 1 x 10<sup>6</sup> 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  $ddH_2O$  or PBS at 100 µg/ml.

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

**Endotoxin Level**: <0.2 EU/ $\mu$ g, determined by LAL method.

**Storage**: Lyophilized recombinant human Fmsrelated 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.

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