

## **DATASHEET** Version 20181206

## Flt-3L, RhesusMacaque

Cat. No.: Z02762-1

**Size**: 1.0 mg

Synonyms: Flt-3 Ligand (Flt-3L), RhesusMacaque

## **Description:**

Flt-3 ligand (FL) is a recently identified hematopoietic cytokine whose activities are mediated by binding to the transmembrane glycoprotein Flt-3. Flt-3 was first discovered as a member of the class III subfamily of receptor tyrosine kinases (RTK) whose expression among hematopoietic cells was found to be restricted to highly enriched stem/progenitor cell populations. Additional class III RTKs include the receptors from SCF, M-CSF and PDGF. Not surprisingly, Flt-3 ligand is also structurally related to M-CSF and SCF. All three cytokines have been shown to exist both as type I transmembrane proteins and as soluble proteins.

## **Amino Acid Sequence:**

00001 TQDCSFQHSP ISSDFAVKIR ELSDYLLQDY PVTVPSNLQD 00041 EELCGALWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIH 00081 FVTKCAFQHP PSCLRFVQTN ISRLLQETSE QLVALKPWIT 00121 RQNFSRCLEL QCQPDSSTLP PPRSPGALEA TALTAPQRP Source: E. coli

Species: RhesusMacaque

**Biological Activity**: Fully biologically active when compared to standard. The ED<sub>50</sub> as determined by a cell proliferation assay using human AML5 cells is less than 1.0 ng/ml, corresponding to a specific activity of  $> 1.0 \times 10^6$  IU/mg.

**Molecular Weight**: Approximately 18.0 kDa, a single non-glycosylated polypeptide chain containing 159 amino acids.

**Formulation**: Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4.

**Appearance**: Sterile Filtered White lyophilized (freeze-dried) powder.

**Reconstitution**: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at  $\leq$  -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

**Endotoxin Level**: Less than 1 EU/µg of rRhFlt-3L as determined by LAL method.

**Storage**: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.