



## PRODUCT DATA SHEET

**Product:** Flt3 Ligand (recombinant human)

**Cat. No.:** BC-259 (10 µg)

**Synonyms:**

SL cytokine precursor (Fms-related tyrosine kinase 3 ligand), Flt3L

**Background:**

Binds to Fms-Like Tyrosine Kinase-3 (FLT-3). Human FLT3 Ligand also stimulates the proliferation of cells expressing mouse FLT-3 receptors. The effects of FLT-3 Ligand are synergized by co-expression of G-CSF, GM-CSF, M-CSF, IL3 and SCF. FLT-3 Ligand promotes long-term expansion and differentiation of human pro-B-cells in the presence of IL7 or in combination of IL7 and IL3.

**Description:**

Recombinant Human Flt3 Ligand produced in E.Coli is non-glycosylated, polypeptide chain containing 155 amino acids and having a molecular mass of 17605 Dalton. Recombinant FLT3 Ligand is purified by proprietary chromatographic techniques.

**Amino Acid Sequence:**

The sequence of the first five N-terminal amino acids was determined to be Thr-Gln-Asp-Cys-Ser.

**Origin:**

Produced in *E. coli*.

**Format:**

Sterile filtered white lyophilized (freeze-dried) powder.

**Purity:**

Greater than 98.0% as determined by RP-HPLC, anion-exchange FPLC, reducing and non-reducing SDS-PAGE Silver Stained gel. Recombinant human FLT-3 was lyophilized with no additives.

Dimers and aggregates: less than 1% as determined by SDS-PAGE.

**Endotoxin:**

Less than 0.1 ng/µg (1EU/µg).

**Reconstitution:**

Reconstitute in sterile 18 MΩ-cm H<sub>2</sub>O at not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.

**Biological Activity:**

Recombinant human Flt3 Ligand is fully biologically active when compared to standard. The ED<sub>50</sub>, calculated by the dose-dependant stimulation of the proliferation of human AML5 cells, is less than 1.0 ng/mL, corresponding to a specific activity greater than 1 x 10<sup>6</sup> units/mg.

**Storage and Stability:**

Lyophilized FLT3, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FLT3 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 avoid freeze-thaw cycles.

**Limitations:**

For *in vitro* research use only. Not for use in diagnostics or in humans.

**Warranty:**

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.