



PRODUCT DATA SHEET

Product: Flt3 Ligand (recombinant mouse)

Cat. No.: BC-260 (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 mouse Flt3 Ligand produced in E.Coli is non-glycosylated, polypeptide chain containing 144 amino acids and having a molecular mass of 16,431 Dalton. Recombinant mouse 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 mouse 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 (IEU/µg).

Reconstitution:

Reconstitute in sterile 18 MΩ-cm H₂O at not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.

Biological Activity:

Recombinant mouse Flt3 Ligand is fully biologically active when compared to standard. The activity is determined by the ability to generate CD11c+ splenic dendritic cells in vivo in C57B1/6-12 week female mice. To obtain the desired affect, mice were treated with approximately 25 µg of flt 3Ligand once daily for 9 consecutive days via intraperitoneal injection.

Storage and Stability:

Lyophilized recombinant mouse Flt3, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution recombinant mouse 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.