

Recombinant Murine FLT3-Ligand

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. CTK-340
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➤ **Background:**

This ligand binds to Fms-Like Tyrosine Kinase-3 (FLT-3). Human FLT3 ligand also stimulates the proliferation of cells expressing murine FLT-3 receptors. The effects of FLT-3 ligand are synergized by coexpression 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 Murine Flt3-Ligand produced in E.Coli is a non-glycosylated, polypeptide chain containing 144 amino acids and having a molecular mass of 16431 Dalton.

Recombinant FLT3 Ligand is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

➤ **Formulation:**

FLT-3 was lyophilized with no additives.

➤ **Solubility:**

It is recommended to reconstitute the lyophilized FLT-3 in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

↻ **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.

↻ **Purity:**

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

↻ **Amino acid sequence:**

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

↻ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

↻ **Biological Activity:**

This rmFlt3-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 25ug of flt3-ligand once daily for 9 consecutive days via intraperitoneal injection.

↻ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of FLT-3.

↻ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 .
2. Analysis by RP-HPLC, using a standard solution of FLT3 as a Reference Standard.

↻ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.