

Recombinant Human Fms-related Tyrosine Kinase 3 Ligand (rHuFlt3-Ligand) PrimeGene Technical DataSheet

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| Catalog Number: | 103-05 |
| Source: | <i>Escherichia coli</i> |
| Molecular Weight: | Approximately 17.6 kDa, a single non-glycosylated polypeptide chain containing 155 amino acids. |
| Size: | 10µg/ 100µg/ 500µg/ 1mg |
| AA Sequence: | TQDCSFQHSP ISSDFAVKIR ELSDYLLQDY PVTVASNLQD EELCGGLWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIH FVTKCAFQPP PSCLRFVQTN ISRLQETSE QLVALKPWIT RQNFSRCLEL QCQPDSSTLP PPWSPRPLEA TAPTA |
| Purity: | > 97 % by SDS-PAGE and HPLC analyses. |
| Biological Activity: | Fully biologically active when compared to standard. The ED ₅₀ 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 × 10 ⁶ IU/mg. |
| Physical Appearance: | Sterile Filtered White lyophilized (freeze-dried) powder. |
| Formulation: | Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.0. |
| Endotoxin: | Less than 1 EU/µg of rHuFlt3-Ligand as determined by LAL method. |
| 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 ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |
| Shipping: | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage: | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution. |
| Usage: | This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. |

Human Fms-related Tyrosine Kinase 3 Ligand

Flt3-ligand (FL) is a recently identified hematopoietic cytokine whose activities are mediated by binding to the transmembrane glycoprotein Flt3. Flt3 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. Additionally, class III RTKs include the receptors from SCF, M-CSF and PDGF. Not surprisingly, Flt3-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. The predominant human FL isoform is a transmembrane protein that can undergo proteolytic cleavage to generate a soluble form of the protein. An alternatively-spliced FL mRNA, encoding a soluble form of the human FL, has also been identified. FL is widely expressed in various human and mouse tissues. FL has been shown to synergize with a wide variety of hematopoietic cytokines to stimulate the growth and differentiation of early hematopoietic progenitors.