Technical Data Sheet

Recombinant Mouse Flt-3 Ligand (rMu Flt-3L)

Mouse Flt-3L

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. The predominant human FL isoform is a transmembrane protein that can undergo proteolytic cleavage to generate a soluble form of the protein. At the amino acid sequence level, human and mouse FL are approximately 72% identical and the two proteins exhibit cross-species activity.

Catalog Number:	RC234-16
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 18.6 kDa, a single non-glycosylated polypeptide chain containing 162 amino acids.
Quantity:	2ug/10µg/1mg
Purity:	>97% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED_{50} as calculated by the dose-dependant stimulation of the proliferation of human AML5 cells is less than 8.0 ng/ml.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.0.
AA Sequence:	TPDCYFSHSP ISSNFKVKFR ELTDHLLKDY PVTVAVNLQD EKHCKALWSL FLAQRWIEQL KTVAGSKMQT LLEDVNTEIH FVTSCTFQPL PECLRFVQTN ISHLLKDTCT QLLALKPCIG KACQNFSRCL EVQCQPDSST LLPPRSPIAL EATELPEPRP RQ
Endotoxin:	Less than 1EU/µg of rmFlt-3L 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.
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**.
Usage:	This material is offered by Bio Basic Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.