Technical Data Sheet

Recombinant Rhesus macaque Flt-3 Ligand (rRhFlt-3L)

Rhesus macaque Flt-3 Ligand

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

Catalog Number: RC224-16

Source: *Escherichia coli.*

Molecular Weight: Approximately 18.0 kDa, a single non-glycosylated polypeptide chain containing 159 amino acids.

Quantity: 2ug/10ug/1mg

AASequence:

TQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVPSNLQDEELCGALW
RLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQHPPSCL
RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPP
RSPGALEATALTAPQRP

Purity: >97% by SDS-PAGE and HPLC analyses.

Biological Activity: The ED50 as calculated by the dose-dependent stimulation of the proliferation of human AML5 cells is less than 1.0 ng/ml, corresponding to a Specific Activity of 1.0×10^6 IU/mg.

Formulation: Lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.4.

Endotoxin: Less than 1EU/μg of rRhFlt-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**.

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