

Recombinant Rhesus Macaque Fms-related Tyrosine Kinase 3 Ligand

#R00211

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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. Additionally, 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. FL has been shown to synergize with a wide variety of hematopoietic cytokines to stimulate the growth and differentiation of early hematopoietic progenitors.

AA Sequence

TQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVPSNL
QDEELCGALWRLVLAQRWMERLKTIVAGSKMQGLLE
RVNTEIHFTKCAQFQHPSPCLRFVQTNISRLQETSE
QLVALKPWITRQNFRCLELQCQPDSSTLPPRSPG
ALEATALPQRP

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.

Product Specification

Synonyms	Flt3L, SL cytokine
Accession	H9Z6V7
GeneID	719239
Species	Rhesus
Source	Escherichia coli.
Molecular Weight	Approximately 18.0 kDa, a single non-glycosylated polypeptide chain containing 159 amino acids.
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 Sterile Filtered White lyophilized

Appearance (freeze-dried) powder.

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

Endotoxin Less than 1 EU/µg of rRhFit-3L
as determined by LAL method.