

Recombinant Rhesus Macaque Fms-related Tyrosine Kinase 3 Ligand

Information

Gene ID	719239			
Accession #	H9Z6V7			
Alternate Names	FIt3L, SL cytokine			
Source	Escherichia coli.			
M.Wt	Approximately 18.0 kDa, a single non-glycosylated polypeptide chain containing 159 amino acids.			
AA Sequence	TQDCSFQHSP ISSDFAVKIR ELSDYLLQDY PVTVPSNLQD EELCGALWRL VLAQRWMERL KTVAGSKMQG LLERVNTEIH FVTKCAFQHP PSCLRFVQTN ISRLLQETSE QLVALKPWIT RQNFSRCLEL QCQPDSSTLP PPRSPGALEA TALTAPQRP			
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.			
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			
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4.			
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 \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.			
Biological Activity	Fully biologically active when compared to standard. The ED 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 \times 10 IU/mg.			
Shipping Condition	Gel pack.			
Handling	Centrifuge the vial prior to opening.			
Usage	For Research Use Only! Not to be used in humans.			
Components and Storage				

Components and Storage

Components	10µg	100µg	500µg
Recombinant Rhesus Macaque Fms-related Tyrosine Kinase 3 Ligand	10µg	100µg	500µg

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

Quality Control	19 million	e19	
Purity	> 97 % by SDS-PAGE and HPLC analyses.	PER COMPANY	
Endotoxin	Less than 1 EU/ μ g of rRhFlt-3L as determine	an 1 EU/ μ g of rRhFlt-3L as determined by LAL method.	

Description

FIt-3 ligand (FL) is a recently identified hematopoietic cytokine whose activities are mediated by binding to the transmembrane glycoprotein FIt-3. FIt-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, FIt-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.

Reference

1. Hacein-Bey S, Basile GD, Lemerle J, et al. 1998. Blood, 92: 4090-7

2. Peters M, Solem F, Goldschmidt J, et al. 2001. Exp Hematol, 29: 146-55

3. Beq S, Fontanet A, Theze J, et al. 2004. AIDS, 18: 2089-91

4. Mahadevan D, Choi J, Cooke L, et al. 2009. Hum Genomics Proteomics, 2009: 453634

5. Coates PT, Barratt-Boyes SM, Zhang L, et al. 2003. Blood, 102: 2513-21.

