

Product Description

Alternate Names: c-Kit Ligand, KL, Steel Factor, MGF

Accession/Uniprot Number: P21583

Description: Stem cell factor (SCF) is a cytokine made by fibroblasts and endothelial cells. SCF binds to the receptor c-Kit/CD117 and plays a critical role in the maintenance, survival, and differentiation of hematopoietic stem cells. While human SCF shows no activity on murine cells, murine and rat SCF are active on human cells.

Source: Genetically modified *E.coli*. **This product is produced with no animal or human origin raw products. All processing and handling employs animal free equipment and animal free protocols.**

Predicted MW: Monomer, 18.6 kDa (165 amino acids)

AA Sequence: MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTDL LDKFSNISEG LSNYSIIDKL VNIVDLVEC VKENSSKDLK KSFKSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV VSSTLSPEKD SRVSVTKPFM LPPVA

Formulation: **ALERT-NEW** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5

Product Specifications

Specification	Method of Determination	Acceptance Criteria	Result
Purity	Reducing and Non-reducing SDS-PAGE	≥95%	>95%
Endotoxin	Kinetic LAL (50% confidence)	≤ 1 EUs/ug	<0.05 EUs/ug
Biological Activity	TF-1 cell proliferation	ED50 ≤ 15 ng/mL (≥ 6.7 x 10 ⁴ units/mg)	ED50 = 1 ng/mL (1.0 x 10 ⁶ units/mg)

Product Preparation and Storage

Country of Origin: USA

Shipping: Room temperature

Storage Prior to Reconstitution: -20°C

Reconstitution: **ALERT-NEW** Sterile water at 0.1 mg/mL

Date of Recon.: _____ **Initials:** _____

Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws.

Expiration Date: _____ **Date Received:** _____

12 months from date of receipt when stored at -20°C to -80°C as supplied.

1 month when stored at 4°C after reconstituting as directed.

3 months when stored at -20°C to -80°C after reconstituting as directed.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

X *Olivia Schneider, PhD 6-8-2017*

Quality Assurance