

# Certificate of Analysis



Recombinant Animal-Free Human SCF

Catalog Number: 100-04AF

Lot Number: 0213-100-04AF

## Product Description

**Alternate Names:** c-Kit Ligand, KL, Steel Factor, MGF      **Accession 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-derived raw products. All processing and handling employs animal-free equipment and animal-free protocols.**

**Predicted MW:** Monomer, 18.6 kDa (165 aa)

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

**Formulation:** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM acetic acid

## 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 <sup>4</sup> units/mg)	ED50 = 5.3 ng/mL (1.9 x 10 <sup>5</sup> units/mg)

## Product Preparation and Storage

**Country of Origin:** USA      **Shipping:** Room temperature      **Storage Prior to Reconstitution:** -20°C

**Reconstitution:** Sterile 10 mM HCl 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 in a manual defrost freezer at -80 °C and avoid repeat freeze thaws.

**Expiration Date:**

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

**Date Received:** \_\_\_\_\_

- 1 month when stored at 4 °C after reconstituting as directed.
- 3 months when stored at -20 to -80 °C after reconstituting as directed.

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

 2/7/17  
Quality Control