



# Product Data Sheet

Recombinant Human SCF

Catalog Number: 100-04

## 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*.

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

**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 sodium phosphate, 50 mM sodium chloride, pH 7.5

## Product Specifications\*

\*Lot-specific values for the following specifications are supplied with each production lot on its corresponding COA.

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

## Product Preparation and Storage

**Country of Origin:** USA

**Shipping:** Room temperature

**Storage Prior to Reconstitution:** -20°C

**Product Reconstitution:** Sterile water at 0.1 mg/mL

**Instructions:** 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:

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!**