



***Recombinant Human SCF***  
*(Stem Cell Factor)*

*Catalog Number: 100-04*  
*Accession Number: P21583*

***Specifications and Uses:***

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

**Description:**

Stem Cell Factor (SCF) is a cytokine made by fibroblasts and endothelial cells. SCF binds to the receptor known as c-Kit (CD117) and is thought to play a critical role in the maintenance or survival of hematopoietic stem cells. Human SCF shows no activity on murine cells, but murine and rat SCF are active on human cells. Recombinant human SCF is a non-glycosylated protein, containing 165 amino acids, with a molecular weight of 18.4 kDa

**Source:** *E.coli*

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation and Stability:**

Recombinant human SCF is lyophilized from 10 mM acetic acid (AcOH) at a concentration of 1 mg/mL. Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Protein Content and Purity (typically ≥ 98%) determined by:**

Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

**Endotoxin Level:**

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

**Biological Activity:**

The activity is determined by the dose-dependent stimulation of Human TF-1 cells and is typically 1-5 ng/mL.

**AA Sequence:**

MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTDL LDKFSNISEG  
LSNYSIIDKL VNIVDDLVEC VKENSSKDLK KSFKSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV  
VSSTLSPEKD SRVSVTKPFM LPPVALPPVA

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

Gentauro Molecular Products  
Voortstraat 49  
1910 Kampenhout, Belgium