



Recombinant Rat SCF
(Stem Cell Factor)

Catalog Number: 300-32
Accession Number: P21581

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 rat 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 rat SCF is lyophilized with no additives.

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 **10 mM acetic acid (AcOH)** 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 its ability to induce proliferation of TF-1 cells and is typically less than 10 ng/mL.

AA Sequence:

MQEICRNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL PSHCWL RDMV THLSVSLTTL LDKFSNISEG
LSNYSIIDKL GKIVDDL VAC MEENAPKNVK ESLKKPETRN FTPEEFSIF NRSIDAFKDF MVASDTSDCV
LSSTLGPEKD SRVSVTKPFM LPPVA

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

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