



Recombinant Mouse SCF
(Stem Cell Factor)

Catalog Number: 200-09
Accession Number: P20826

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 mouse SCF is a non-glycosylated protein, containing 164 amino acids, with a molecular weight of 18.3 kDa.

Source: *E.coli*

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

Formulation and Stability:

Recombinant mouse SCF is lyophilized from a concentrated (1mg/mL) solution in water containing 10 mM Na₂PO₄, pH 6.5. 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 proliferation of human TF-1 cells and is typically less than 10 ng/mL.

AA Sequence:

KEICGNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL PSHCWL RDMV IQLSLSLTTL LDKFSNISEG
LSNYSIIDKL GKIVDDL VLC MEENAPKNIK ESPKRPETRS FTPEEFFSIF NRSIDAFKDF MVASDTSDCV
LSSTLGPEKD SRVSVTKPFM LPPVA

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

Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium