

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant SCF, Mouse

Catalog Number: BK0345-1mg

Source: *P. pastoris*

Quantity: 1mg

Description:

Stem Cell Factor (SCF) is a hematopoietic growth factor that binds to the c-Kit receptor. SCF exerts its activity during the early stages of hematopoiesis. SCF stimulates the proliferation of myeloid, erythroid, and lymphoid progenitors in bone marrow cultures and has been shown to act synergistically with colony stimulating factors. Recombinant mouse Stem Cell Factor (rmSCF) produced in *P. pastoris* is a single glycosylated polypeptide chain containing 165 amino acids. A fully biologically active molecule, rmSCF has a molecular mass of 18.4kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

18.4kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Biological Activity:

ED50 < 10.0 ng/ml, measured by a cell proliferation assay using human TF-1 cells, corresponding to a specific activity of > 1.0 × 10⁵ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against 50mM Tris, pH8.0.

AA Sequence:

MKEICGNPVTDNVVDITKLVANLPNDY-
MITLNYVAGMDVLP SHCWLRD-
MVIQLSLSLTLLDKFSNISEGLSNYSIIDKLG-
KIVDDLVL CMEENAPKNIKESPKRPETRS-
FTPEEFFSIFNRSIDAF-
KDFMVASDTSDCVLSSTLGPEKDSRVSVTKPFML
PPVA

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μg/ml.

Storage:

Lyophilized recombinant mouse Stem Cell Factor (rmSCF) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rmSCF should be stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

Usage:

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