

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant SCF, Rat

Catalog Number: BK0346-10µg

Source: *P. pastoris*

Quantity: 10µg

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 rat Stem Cell Factor (rrSCF) produced in *P. pastoris* is a single glycosylated polypeptide chain containing 164 amino acids. A fully biologically active molecule, rrSCF has a molecular mass of 18.3 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

18.3 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE analysis.

Biological Activity:

ED50 < 25 ng/mL, measured by a cell proliferation assay using TF-1 Cells, corresponding to a specific activity of > 4 × 10⁴ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

QEICRNPVTDNVKDITKLVANLPNDYMITLNY-
VAGMDVLP SHCWLRD-
MVTHLSVSLTLLDKFSNISEGLSNYSIIDKLG-
KIVDDL VACMEENAPKNV KESLKKPETRN-
FTPEEFFSIFNRSIDAF-
KDFMVASDTSDCVLSSTLGPEKDSRVSVTKPFML
PPVA

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 µg/mL.

Storage:

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

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.