

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant SCF, Human (P. pastoris-expressed)

Catalog Number: BK0344-1mg

Source: P. pastoris

Quantity: 1mg

### Description:

Stem Cell Factor (SCF) is a hematopoietic growth factor that 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 human Stem Cell Factor (rhSCF) produced in Pichia pastoris is a glycosylated polypeptide chain of 165 amino acids. A fully biologically active molecule, rhSCF has a molecular mass of ~20kDa analyzed by reducing SDS-PAGE and is obtained by proprietary refolding and chromatographic techniques at GenScript.

### Molecular Weight:

~20 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE analysis.

### Biological Activity:

The ED50, as determined by the dose-dependent stimulation of human TF-1 cells, is < 2 ng/ml, corresponding to a specific activity of  $5 \times 10^5$  IU/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against 10 mM acetic acid.

### AA Sequence:

MEGICRNRVTNNVKDVTKLVANLPKDY-  
MITLKYVPGMDVLP SHCWISEM VVQLSDSLT-  
DLLDKFSNISEGLSNYSI-  
IDKLVNIVDDLVECVKENS SKDLKKSFKSPEP-  
RLFTPEEFFRIFNRSIDAF-  
KDFVVASETSDCVVSSTL-  
SPEKDSRVS VTKPFMLPPVA

### Endotoxin:

<1.0 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O at 100  $\mu$ g/ml.

### Storage:

Lyophilized recombinant human Stem Cell Factor (rhSCF) remains stable up to 12 months at -80 °C from date of receipt. Upon reconstitution, rhSCF should be stable up to 4 weeks at 4 °C or up to 6 months at -20 °C.

### Usage:

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