

DATASHEET
Version 20181206**SCF, Human (P. pastoris-expressed)****Cat. No.:** Z02692-1**Size:** 1.0 mg**Synonyms:** C-Kit Ligand, Mast Cell Growth Factor (MGF), Steel Factor**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.

Amino Acid Sequence:

00001 MEGICRNRT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL
00041 PSHCWISEMV VQLSDSLTDL LDKFSNISEG LSNYSIIDKL
00081 VNIIVDDLVEC VKENSSKDLK KSFKSPEPRL FTPEEFFRIF
00121 NRSIDAFKDF VVASETSDCV VSTLSPEKD SRVSVTKPFM
00161 LPPVA

Source: *P. pastoris***Species:** Human**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 5×10^5 IU/mg.**Molecular Weight:** 20 kDa, observed by reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against 10 mM acetic acid.**Reconstitution:** Reconstituted in ddH₂O at 100 µg/ml.**Purity:** > 95% by SDS-PAGE analysis.**Endotoxin Level:** <1.0 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant human Stem Cell Factor (rhSCF) remains stable up to 12 months at lower than -70°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.