

DATASHEET
Version 20181206**SCF, Mouse****Cat. No.:** Z02997-1**Size:** 1.0 mg**Synonyms:** Stem Cell Factor, c-Kit Ligand, Mast Cell Growth Factor (MGF), Steel Factor**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.

Amino Acid Sequence:

00001 MKEICGNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL
00041 PSHCWLRDMV IQLSLSLTTL LDKFSNISEG LSNYSIIDKL
00081 GKIVDDLVL C MEENAPKNIK ESPKRPETRS FTPEEFSIF
00121 NRSIDAFKDF MVASDTSDCV LSSTLGPEKD SRVSVTKPFM
00161 LPPVA

Source: *P. pastoris***Species:** Mouse**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.**Molecular Weight:** 18.4kDa, observed by reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against 50mM Tris, pH8.0.**Reconstitution:** Reconstituted in ddH₂O at 100 µg/ml.**Purity:** > 95% by SDS-PAGE and HPLC analyses.**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant mouse Stem Cell Factor (rmSCF) remains stable up to 6 months at lower than -70°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.