

**Recombinant Human Stem Cell Factor
(rhSCF)
Catalog Number: 102-01**

Description	Stem Cell Factor (SCF) plays essential roles in gametogenesis, melanogenesis and early stages of hematopoiesis. In <i>in vitro</i> and <i>in vivo</i> , SCF can stimulate the proliferation of mature, as well as the proliferation and maturation of immature, mast cells. On purified primitive human and mouse hematopoietic precursors, SCF acts in a synergistic manner with various growth factors, such as IL-1, IL-3, IL-6, IL-7, and Epo, to induce myeloid, erythroid and lymphoid lineage colony formation.
Synonyms	Mast Cell Growth factor (MGF), c-kit Ligand and Steel-Factor (SLF)
AA Sequence	MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTD LDKFSNISEG LSNYSIIDKL VNIVDDLVEC VKENSSKDLK KSFKSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV VSSTLSPEKD SRVSVTKPFM LPPVA
Source	<i>Escherichia coli</i> .
Molecular Weight	Approximately 18.4 kDa, a single non-glycosylated polypeptide chain containing 165 amino acids.
Purity	>97% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active. The ED ₅₀ is < 3ng/ml as determined by the proliferation of human TF-1 cells.
Physical Appearance	White lyophilized powder.
Formulation	Lyophilized from a 0.2µm filtered concentrated (1mg/ml) solution in PBS, pH 7.4.
Endotoxin	< 1EU/µg of growth factor as determined by LAL method.
Reconstitution	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
Storage	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
Usage	This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.