

## 32-20470: Recombinant Human SCF(Discontinued)

**Reactivity :** Human, Monkey, Mouse, Pig, Rabbit, Rat

**Alternative Name :** Stem Cell Factor, c-Kit Ligand, Mast Cell Growth Factor (MGF), Steel Factor

### Description

**Source:** *E.coli* SCF is a hematopoietic growth factor that exerts its activity by signaling through the c-Kit receptor. SCF and c-Kit are essential for the survival, proliferation and differentiation of hematopoietic cells committed to the melanocyte and germ cell lineages. Human SCF manifests low activity on murine cells, while murine and rat SCF are fully active on human cells. The human SCF gene encodes for a 273 amino acid transmembrane protein, which contains a 25 amino acid N-terminal signal sequence, a 189 amino acid extracellular domain, a 23 amino acid transmembrane domain, and a 36 amino acid cytoplasmic domain. The secreted soluble form of SCF is generated by proteolytic processing of the membrane anchored precursor. Recombinant Human SCF is an 18.4 kDa polypeptide containing 165 amino acid residues, which corresponds to the sequence of the secreted soluble form of SCF.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Purity: >= 98% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTDL LDKFSNISEG  
LSNYSIIDKL VNIVDDLVEC VKENSSKDLK KSKFSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV  
VSSTLSPEKD SRVSVTKPFM LPPVA

### Application Note

The  $ED_{50}$  as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is  $\leq 2.0$  ng/ml, corresponding to a specific activity of  $\geq 5 \times 10^5$  units/mg.