

## 32-1744: mSCF Recombinant Protein

**Alternative Name** Kit ligand Precursor,C-kit ligand,SCF,Mast cell growth factor,MGF,SF,KL-1,Kitl,DKFZp686F2250,Hematopoietic growth factor KL,Steel factor.

### Description

Source : Escherichia Coli. Stem Cell Factor Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 165 amino acids and having a molecular mass of 18309 Dalton. The SCF is purified by proprietary chromatographic techniques. Stem cell factor / KIT ligand (SCF) is a cytokine which binds CD117(c-Kit). SCF is also known as 'steel factor' or 'c-kit ligand'. SCF exists in two forms, cell surface bound SCF and soluble (or free) SCF. Soluble SCF is produced by the cleavage of surface bound SCF by metalloproteases.SCF is a growth factor important for the survival, proliferation, and differentiation of hematopoietic stem cells and other hematopoietic progenitor cells. One of its roles is to change the BFU-E (burst-forming unit-erythroid) cells, which are the earliest erythrocyte precursors in the erythrocytic series, into the CFU-E (colony-forming unit-erythroid).

### Product Info

**Amount :** 10 µg  
**Purification :** Greater than 98.0% as determined by:(a) Analysis by SEC-HPLC.(b) Analysis by SDS-PAGE.  
**Content :** Lyophilized from a concentrated (1mg/ml) solution in water containing 0.02% NaHCO<sub>3</sub>.  
**Storage condition :** Lyophilized KIT ligand although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SCF should be stored at 4°C between 2-7 days and for future use below -18°C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.  
**Amino Acid :** MKEICGNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL PSHCWLRDMV IQLSLSLTTL LDKFSNISEG LSNYSIIDKL GKIVDDL VLC MEENAPKNIK ESPKRPETRS FTPEEFSIF NRSIDAFKDF MVASDTSDCV LSSTLGPEKD SRVSVTKPFM LPPVA.

### Application Note

It is recommended to reconstitute the lyophilized Stem Cell Factor in sterile 18MΩ·cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED<sub>50</sub> as determined by the dose-dependant stimulation of Human TF-1 cell line is < 10 ng/ml, corresponding to a Specific Activity of 1x10<sup>5</sup> IU/mg.