

## 32-1748: k9SCF Recombinant Protein

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

### Description

Source : Escherichia Coli. Stem Cell Factor Canine Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 165 amino acids and having a molecular mass of 18.4kDa 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

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 97.0% as determined by HPLC and SDS-PAGE.
<b>Content :</b>	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
<b>Storage condition :</b>	Lyophilized SCF 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.
<b>Amino Acid :</b>	KGICGKRVTD DVKDVTKLVA NLPKDYKIAL KYVPGMDVLP SHCWISVMVE QLSVSLTDLL DKFSNISEGL SNYSIIDKLV KIVDDLVECT EGYSFENVKK APKSPELRLF TPEEFFRIFN RSIDAFKDLE TVASKSSECV VSSTLSPDKD SRVSVTKPFM LPPVA

### Application Note

It is recommended to reconstitute the lyophilized Stem Cell Factor in sterile 18M $\Omega$ -cm H<sub>2</sub>O not less than 100 $\Omega$ µg/ml, which can then be further diluted to other aqueous solutions. Fully biologically active when compared to standard. The ED50 as calculated by the dose-dependent stimulation of the proliferation of human TF-1 cells is less than 2.0ng/ml, corresponding to a specific activity of 5,000,000IU/mg.