

## SCF k9

**Description:** 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.

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

**Source:** Escherichia Coli.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Amino Acid Sequence:** KGICGKRVT DDKDVTCLVA NLPKDYKIAL KYVPGMDVLP  
SHCWISVMVE QLSVSLDLL DKFSNISEGL SNYSIIDKL KIVDDLVECT EGYSFENVKK  
APKSPELRLF TPEEFFRIFN RSIDAFKDL TVASKSSECV VSSTLSPDKD SRVSVTKPFM  
LPPVA

**Purity:** Greater than 97.0% as determined by HPLC and SDS-PAGE.

**Formulation:**

Lyophilized from a 0.2

**Stability:**

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.

**Usage:**

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

**Solubility:**

It is recommended to reconstitute the lyophilized Stem Cell Factor in sterile 18M-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Introduction:**

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).

**Biological Activity:**

Fully biologically active when compared to standard. The ED<sub>50</sub> 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.

Catalog #:CYPs-201

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