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# SCF Human, Sf9

*Stem Cell Factor Human Recombinant, Sf9*
*GRF0371*

## Product Overview

| | |
|---|---|
| Name | SCF Human, Sf9 |

**Description**

Stem Cell Factor Human Recombinant, Sf9

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|---|---|
| Accession (Primary) | P21583 |

**Synonyms**

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

**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).

**Source**

Sf9, Insect Cells.

**Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

**Formulation**

The protein is supplied in 1xPBS, pH 7.4.

**Stability**

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.

**Purity**

Greater than 98.0% as determined by analysis by SDS-PAGE.

**Biological Activity**

The ED 50 as determined by the dose-dependent stimulation of Human TF-1 cells is typically 1-5 ng/ml.

**Solubility**

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It is recommended to reconstitute the lyophilized Stem Cell Factor in 10mM acetic acid not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Protein content**

Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.52 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a standard solution of Stem Cell Factor as a Reference Standard.

**Precautions**

SCF Human, Sf9 is for research use only and not for use in diagnostic or therapeutic procedures.

## Target Information: ( P21583 )