



11175 Flintkote Ave., Suite E, San Diego, CA 92121  
Tel: (858) 642-0978 Fax (858) 642-0937 Toll free: 1-888-723-GENE  
E-mail: [info@imgenex.com](mailto:info@imgenex.com); web site: [www.imgenex.com](http://www.imgenex.com)

## **Recombinant Human Stem Cell Factor (rHuSCF)**

---

### ◀ **Description:**

Recombinant Human SCF produced in E.Coli is a single, non-glycosylated polypeptide chain containing 164 amino acids and having a molecular mass of 18409 Dalton.

The SCF is purified by proprietary chromatographic techniques.

### ◀ **Source:**

**Escherichia Coli.**

### ◀ **Lot Number:** #

### ◀ **Quantity Shipped:**

### ◀ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

### ◀ **Formulation:**

Lyophilized from a concentrated (1mg/ml) solution in water containing 10mM Acetic acid.

### **Solubility:**

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

### ◀ **Stability:**

Lyophilized rHuSCF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuSCF 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:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

◀ **Amino acid sequence:**

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Glu-Gly-Ile-Cys.

◀ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

◀ **Biological Activity:**

rHuSCF is fully biologically active when compared to standard.

The ED<sub>50</sub> as determined by the dose-dependant stimulation of Human TF-1 cells is < 2 ng/ml, corresponding to a Specific Activity of  $5 \times 10^5$  IU/mg.

◀ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of rHuSCF.

◀ **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 SCF as a Reference Standard.