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# SCF

**Catalog # PVGS1034**

## Specification

## SCF - Product Information

Primary Accession P21583-1

**Species**
Human

**Sequence**
Glu26-Ala189, expressed with an N-terminal Met

**Purity**
> 95% as analyzed by SDS-PAGE

**Endotoxin Level**
< 1 EU/ µg of protein by gel clotting method

**Biological Activity**
The ED<sub>50</sub>, as determined by the dose-dependent stimulation of human TF-1 cells, is < 2.0 ng/ml, corresponding to a specific activity of 5 × 10<sup>5</sup> IU/mg.

**Expression System**
P. pastoris

Formulation **Lyophilized after extensive dialysis against 10 mM acetic acid.**

**Reconstitution**
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in dd$H_2O$ up to 100 µg/ml.

**Storage & Stability**
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## SCF - Additional Information

**Target Background**
Stem cell factor (also known as SCF, KIT-ligand, KL, or steel factor) is a cytokine that binds to the c-KIT receptor (CD117). SCF can exist both as a transmembrane protein and a soluble protein. It stimulates the proliferation of myeloid, erythroid, and lymphoid progenitors in bone marrow cultures and has been shown to act synergistically with colony stimulating factors. SCF plays an important role in the hematopoiesis during embryonic development. SCF can regulates HSCs in the stem cell niche in the bone marrow. SCF has been shown to increase the survival of HSCs in vitro and contributes to the self-renewal and maintenance of HSCs in-vivo.

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## SCF - Protein Information

## SCF - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## SCF - Images