

## Recombinant Human Stem Cell Factor (KITLG)

Recombinant human protein expressed in E. coli cells

**Catalog # S816-40N**

Lot # G3223-13

### Product Description

Recombinant Human Stem Cell Factor (KITLG) was expressed in E. coli cells. The protein accession number is [P21583](#)

### Gene Aliases

SCF, Kit ligand, Mast cell growth factor, MGF, c-Kit Ligand

### Endotoxin Level

<1.0 EU/µg of recombinant protein as determined by the LAL method

### Formulation

Lyophilized from a 0.2 µm filtered solution in Tris and NaCl

### Reconstitution Protocol

A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.

### Storage and Stability

The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2° - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

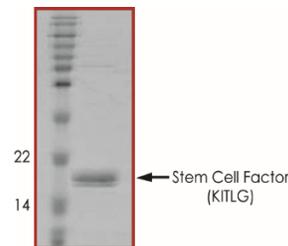
### Scientific Background

SCF is a stromal cell-derived cytokine synthesized by fibroblasts and other cell types. SCF promotes proliferation and early differentiation of cells at the level of multipotent stem cells. It has been suggested that SCF is essential for optimal production of various hematopoietic lineages, mainly because of its ability to prevent apoptosis when co-stimulated with other cytokines. The receptor for SCF, designated SCFR (CD117) is the oncogene designated as KIT. The biological activities of SCF are considerably synergised by colony stimulating factors; GM-CSF and G-CSF, and by IL7, EPO and some other growth and differentiation factors. In combination with IL7, SCF stimulates the proliferation of pre-B cells. SCF is also a potent chemoattractant for cells expressing the kit receptor. Recombinant Human SCF is a monomeric protein that contains intra-chain disulfide bonds.

### Specific Activity

The ED50 as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells was found to be ≤ 0.1 ng/ML

### Purity



Recombinant Human Stem Cell Factor (KITLG) resolved on a 15% SDS-PAGE gel under reducing conditions and stained with Coomassie Brilliant Blue G-250

Approx. MW **18.7 kDa**

## Recombinant Human Stem Cell Factor (KITLG)

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Specific Lot Number G3223-13

Purity 95%

Stability 6 mos. at -20°C from date of shipment

Storage & Shipping

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