# **PRODUCT INFORMATION**

Expression system E.coli

**Domain** 26-189aa

**UniProt No.** P20826

NCBI Accession No. NP\_038626

## **Alternative Names**

Kit ligand, KITLG, Mast cell growth factor, MGF, Stem cell factor, SCF, c-Kit ligand, Steel factor, SF, Kitl, Hematopoietic growth factor KL, KL-1, Familial progressive hyperpigmentation 2, FPH2, SLF, blz, Gb, Grizzlebelly, SL

# **PRODUCT SPECIFICATION**

## **Molecular Weight**

18.4 kDa (165aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

**Tag** Non-Tagged

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

### Description

Stem Cell Factor (SCF) is a glycoprotein that plays a key role in hematopoiesis acting both as a positive and negative regulator, often in synergy with other cytokines. SCF binds to and activates the SCF receptor (SCFR), a receptor tyrosine kinase. SCF stimulates the proliferation of mast cells and is able to augment the proliferation of both myeloid and lymphoid hematopoietic progenitors in bone marrow culture. It also mediates cellcell adhesion



and acts synergistically with other cytokine. Recombinant mouse SCF was expressed in E. coli and purified by conventional column chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer

#### **Amino acid Sequence**

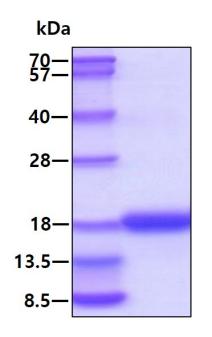
MKEICGNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL PSHCWLRDMV IQLSLSLTTL LDKFSNISEG LSNYSIIDKL GKIVDDLVLC MEENAPKNIK ESPKRPETRS FTPEEFFSIF NRSIDAFKDF MVASDTSDCV LSSTLGPEKD SRVSVTKPFM LPPVA

#### **General References**

Zhang Z., et al. (2000). Proc. Natl. Acad. Sci. u.S.A. 97, 7732. Okada S , et al. (1992). Nippon Rinsho , 50, 1872.

# DATA

## SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.