## **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 26-189aa

**UniProt No.** P21583

NCBI Accession No. NP\_000890.1

### **Alternative Names**

Kit ligand, KITLG, Mast cell growth factor, MGF, Stem cell factor, SCF, c-Kit ligand, steel factor, SF, Kitl, KL-1, Familial progressive hyperpigmentation 2, FPH2, SLF, DFNA69

## **PRODUCT SPECIFICATION**

#### **Molecular Weight**

18.5 kDa (165aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by Bradford assay)

**Formulation** Liquid in. Phosphate-Buffered Saline (pH 7.4)

Purity > 95% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

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 cell-cell adhesion and acts synergistically with other cytokine. Recombinant human 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

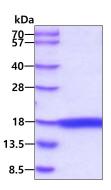
MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTDL LDKFSNISEG LSNYSIIDKL VNIVDDLVEC VKENSSKDLK KSFKSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV VSSTLSPEKD SRVSVTKPFM LPPVA

## **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.