

Recombinant human c-kit Ligand/SCF protein

Catalog Number: ATGP3619

PRODUCT INFORMATION

Expression system

E.coli

Domain

26-189aa

UniProt No.

P21583

NCBI Accession No.

NP_000890

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)

Biological Activity

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 range ≤ 10 ng/ml.

Tag

Non-Tagged

Application

SDS-PAGE, Bioactivity

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

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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

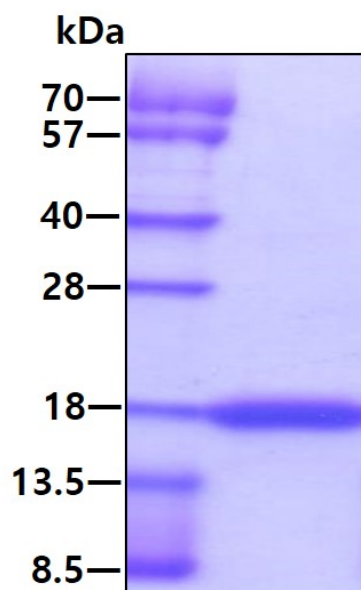
MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTDL LDKFSNISEG LSNYSIIDKL VNIVDLVEC VKENSSKDLK KSFKSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV VSSTLSPEKD SRVSVTKPFM LPPVA

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.

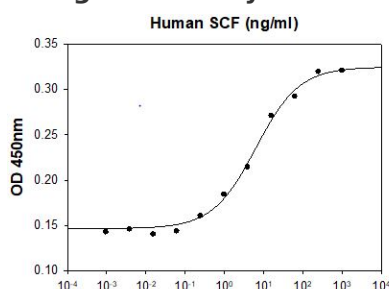
DATA

SDS-PAGE



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

Biological Activity



Human SCF stimulates cell proliferation of the TF-1 human erythroleukemic cells. The ED50 range ≤ 10 ng/ml.