

DATA SHEET

Product Information

Synonyms

: Kit ligand,

: Recombinant Human Stem Cell Factor (rhSCF)

: Kit ligand,

: Recombinant human Stem Cell Factor produced in E. coli is an 18.4 kDa protein containing 165 amino acids. SCF is a hematopoietic growth factor that exerts its activity by signaling through the c-Kit receptor. It is particularly important in the mast cell and erythroid lineages, but also acts on multipotential stem and progenitor cells, megakaryocytes, and a subset of lymphoid progenitors. SCF exists in soluble or transmembrane forms which appear to differ in function.

NCBI Accession No. : NM 003994.5

Amino acid sequence : MEGICRNRVTNNVKDVTKLVANLPKDYMITLKYVPGMDVLPSHCWISEMVV

QLSDSLTDLLDKFSNISEGLSNYSIIDKLVNIVDDLVECVKENSSKDLKKS FKSPEPRLFTPEEFFRIFNRSIDAFKDFVVASETSDCVVSSTLSPEKDSRV

SVTKPFMLPPVA

Molecular Mass : 18.55 kDa (165 aa)

Protein Tags : No tagging
Source : E. coli.

Cat. No. : JW-H003-0010, JW-H003-0025, JW-H003-0050, JW-H003-0100, JW-

H003-0250, JW-H003-0500, JW-H003-1000

Storage : Should be at \leq -70 $^{\circ}$ C as undiluted aliquots of handy size. Avoid

repeated freezing and thawing.

Cross Reactivity : Monkey

Quality Control

Test items		Specifications
Appearance	:	Clear, colorless liquid
Purity	:	Greater than 98 % by RP-HPLC and SDS-PAGE
Specificity	:	Using Western blot, detection Cell Proliferation assay (TF-1)
Concentration	:	0.1 mg/ml, Bradford method
Biological Activity	:	Determined by measuring the proliferation of murine TF-1 indicator cells. The ED ₅₀ is \leq 5 ng/ml, corresponding to a specific activity of 0.2 × 10 ⁵ U/mg
Endotoxin	:	Less than 0.2 EU/μg as determined by the LAL method
Formulation	:	40mM Tris-acetate, 5% glycerol (pH 8.0) without preservative or carrier proteins.
Stability	:	Stable for up to 12 months at -70 $^{\circ}\!$
Sterility	:	Sterilized through a 0.2 $\mu\mathrm{m}$ membrane filter and packaged aseptically. Culture for 2 weeks, no growth

Manufacturer : JW CreaGene Inc.

FL2, Jungang induspia V, 138-6, Sangdaewon-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do, South Korea (462-120)

Tel: 82-31-737-3310, Fax: 82-31-737-3301