



PRODUCT DATA SHEET

Product: Stem Cell Factor, (recombinant human)

Cat. No.: BC-292 (10 µg)

Synonyms:

Kit ligand precursor (C-kit ligand)
Stem cell factor (SCF)
Mastcell growth factor (MGF)

Description:

Recombinant Human SCF produced in E.Coli is a single, non-glycosylated polypeptide chain containing 165 amino acids and having a molecular mass of 18,409 Dalton.

Amino Acid Sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Glu-Gly-Ile-Cys.

Origin:

Produced in *E. Coli*.

Format:

Sterile filtered white powder. Lyophilized from a 1 mg/mL solution in water containing 10 mM acetic acid.

Purity:

Greater than 98.0% as determined by RP-HPLC, anion-exchange FPLC, reducing and non-reducing SDS-PAGE Silver Stained gel. Dimers and aggregates: less than 1% as determined by silver-stained SDS-PAGE.

Endotoxin:

Less than 0.1 ng/µg (1EU/µg) of recombinant human SCF.

Reconstitution:

Reconstitute the lyophilized recombinant human SCF in sterile 18MΩ-cm H₂O not less than 100 µg/mL, which can then be further diluted to other aqueous solutions. Avoid repeated freeze/thaw cycles.

Biological Activity:

Recombinant Human SCF is fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of Human TF-1 cells is less than 2 ng/mL, corresponding to a specific activity of 10⁵ IU/mg.

Storage:

Lyophilized Human Recombinant Stem Cell Factor, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution, Human Recombinant Stem Cell Factor should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. **KAMIYA BIOMEDICAL COMPANY** is not liable for any damage, personal injury, or economic loss caused by this product.