



Recombinant Rat Stem Cell Factor/KIT Ligand Datasheet

Catalog Number: PR27121

Product Type: Recombinant Protein

Source: *E.Coli*

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.

Description/Molecular Mass: Stem cell factor Rat Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 165 amino acids and having a molecular mass of 18409 Dalton.

The SCF is purified by proprietary chromatographic techniques.

Protein Content: Protein quantitation was carried out by two independent methods:
1. UV spectroscopy at 280 nm using the absorbency value of 0.52 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a standard solution of Stem Cell Factor as a Reference Standard.

Purity: Greater than 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Biological Activity: The ED₅₀, calculated by the ability to inhibit 5ng/ml of BMP-4 induced alkaline phosphatase production by ATCD-5 chondrogenic cells < 0.06 µg/ml.

Format: Lyophilized from a concentrated (1mg/ml) solution in water containing 10mM Acetic acid.

Reconstitution: It is recommended to reconstitute the lyophilized Stem Cell Factor in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Storage: Lyophilized KIT ligand although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SCF should be stored at 4°C between 2-7 day and for future use below -18°C.
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

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