

Recombinant Human SCF

Catalog # FL162

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 98% by SDS-PAGE or HPLC.
Endotoxin	< 0.1 EU/μg of recombinant SCF protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Human
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of $\geq 5 \times 10^5$ units/mg
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Accession #	P21583 Glu26-Ala189
Amino acid sequence	EGICRNRVTNNVKDVTKLVANLPKDYMITLKYVPGMDVLP SHCWISEM VVQLSDSLTDLLDKFSNI SEGLSNYSIIDKLVNIV DDLVECVKENSSKDLKKSFKSPEPRLFTPEEFFRIFNRSIDAFKDFVVASETSDCVVSS TLSPEKDSRVS VTKPFMLPPVA
Molecular weight	Approximately 18.5 kDa, a single non-glycosylated polypeptide chain containing 164 amino acids.
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored $\leq -20^\circ\text{C}$. Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Human SCF is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Stem cell factor (SCF), also known as c-kit ligand (KL), is a hematopoietic growth factor that binds to the c-KIT receptor. SCF is a primary growth and activation factor for mast cells and eosinophils, and plays an important role in hematopoiesis, spermatogenesis, and melanogenesis. It exists in both soluble and transmembrane forms, and both are functionally active. Recombinant human SCF is an 18.5 kDa polypeptide containing 164 amino acid residues.

