Recombinant Mouse SCF

Catalog # FL161

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE or HPLC.
Endotoxin	< 0.1 EU/μg of rMuSCF protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Mouse
Tag	Tag free.
Activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using human TF-1 cells is less than 10 ng/ml, corresponding to a specific activity of ≥ 1.0×10^5 IU/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 ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	P20826 Lys26-Ala190
Amino acid sequence	KEICGNPVTDNVKDITKLVANLPNDYMITLNYVAGMDVLPSHCWLRDMVIQLSLSLTTLLDKFSNISEGLSNYSIIDKLGKIVDDLVLCMEENAPKNIKESPKRPETRSFTPEEFFSIFNRSIDAFKDFMVASDTSDCVLSSTLGPEKDSRVSVTKPFMLPPVA
Molecular weight	Approximately 18.4 kDa, a single non-glycosylated polypeptide chain containing 165 amino acids.
Synonyms	Hematopoietic growth factor KL, MGF
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored ≤ -20°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 Mouse SCF is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Stem Cell Factor (SCF) which binds to the c-Kit receptor is produced by fibroblasts and endothelial cells. The soluble and transmembrane forms of the protein are formed by alternative splicing of the same RNA transcript and the presence of both soluble and transmembrane It is required for normal hematopoietic function and plays an important role in hematopoiesis, spermatogenesis, and melanogenesis. It also promotes mast cell adhesion, migration, proliferation, and survival. Human SCF manifests low activity on Mouse cells, while Mouse and rat SCF are fully active on human cells. Recombinant Mouse SCF is an 18.4kDa polypeptide containing 165 amino acid.

Validation Images