

LeadGMP® Human SCF Protein, His Tag, E. coli

Catalog Number LDG022PHE-GMP

Package 100 μg / 1 mg / Customized package For full product information, images and publications, please visit our website.



Specifications

Species of Origin

Human

Affinity Tag

His Tag (C-term)

Purity

>98% as determined by SDS-PAGE analysis.

Activity

Measure by its ability to induce TF-1 cells proliferation. The ED50 for this effect is <5 ng/mL. The specific activity of recombinant human SCF is $> 5 \times 10^5 \text{ IU/mg}$.

Mycoplasma

Not detected

Expression system

Escherichia coli

Buffer

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Molecular weight

The protein has a calculated MW of 19.4 kDa. The protein migrates as 21 kDa under reducing condition (SDS-PAGE analysis).

Endotoxin level

< 0.05 EU per 1 μg of the protein by the LAL method.

Form

Lyophilized

Background



Background

Stem Cell Factor (SCF) is a 166-amino-acid protein with a monomeric molecular weight of approximately 18.5 kDa. SCF is the ligand for the tyrosine kinase receptor c-kit, which regulates other growth factors, such as granulocyte colony-stimulating factor (G-CSF), granulocyte macrophage-colony-stimulating factor (GM-CSF), and interleukin-3 to stimulate proliferation, and differentiation of hematopoietic stem cells. SCF can be produced by a variety of cells, including fibroblasts, smooth muscle, endothelial cells, mast cells and bone marrow macrophages endothelial cells.

Synonyms

Stem cell factor, Mast cell growth factor, MGF, c-Kit ligand, Kit ligand

Uniprot ID

P21583

Sequence Note

Glu26-Ala189

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H₂O to a concentration not less than 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.



Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

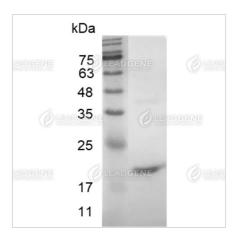
Avoid repeated freeze/thaw cycles.

Manufacturing specifications

LeadGMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP certified facility. The processes include:

- Animal-free reagent and laboratory
- Manufactured and tested under GMP guideline
- Testing and traceability of raw material
- Records of the maintenance and equipment calibration
- Personnel training records
- Batch-to-batch consistency
- Documentation of QA control and process changes
- Manufactured and tested under an ISO 13485:2016 certified quality management system
- Stability monitor of product shelf-life

Image



SDS-PAGE analysis of LeadGMP® SCF, Human



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