

RP00613

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Recombinant Rat SCF/Stem Cell Factor Protein

Catalog No.: RP00613

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Rat	60427	P21581

Tags

C-6×His

Synonyms

Kit ligand; Hematopoietic growth factor KL; Mast cell growth factor; MGF; Steel factor; Stem cell factor; SCF

Product Information

Source	Purification
<I>E. coli</I>	> 95% by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Background

Stem cell factor (SCF), is the ligand for the receptor-type protein-tyrosine kinase KIT. It plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. KITLG/SCF binding can activate several signaling pathways. It also promotes phosphorylation of PIK3R1, which is the regulatory subunit of phosphatidylinositol 3-kinase, and subsequent activation of the kinase AKT1. KITLG/SCF and KIT also transmit signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. KITLG/SCF and KIT promote activation of STAT family members STAT1, STAT3 and STAT5.

Basic Information

Description

Recombinant Rat SCF/Stem Cell Factor Protein is produced by <I>E. coli</I> expression system. The target protein is expressed with sequence (Gln26-Ala189) of rat SCF/Stem Cell Factor (Accession #P21581) fused with an initial Met at the N-terminus and a 6×His tag at the C-terminus.

Bio-Activity

Storage

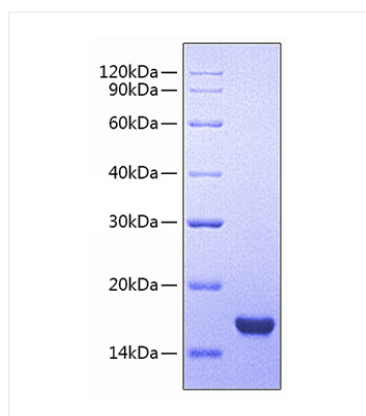
Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact



www.abclonal.com

Validation Data



Recombinant Rat SCF/Stem Cell Factor
Protein was determined by SDS-PAGE under
reducing conditions with Coomassie Blue.