



# Recombinant Rat SCF (C-6His)

<b>Catalog #</b>	EPT253
<b>Expression Host</b>	Human Cells
<b>DESCRIPTION</b>	Recombinant Rat Kit Ligand is produced by our Mammalian expression system and the target gene encoding Gln26-Ala189 is expressed with a 6His tag at the C-terminus.
<b>Accession</b>	P21581
<b>Synonyms</b>	FPH2; KIT ligand; Kitl; KITLG; KL-1; Mast cell growth factor; MGF; MGFSHEP7; SCF; SCFStem cell factor; SFc-Kit ligand; SLF; steel factor
<b>Mol Mass</b>	19.4 KDa
<b>AP Mol Mass</b>	23-40 KDa, reducing conditions
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
<b>FORMULATION</b>	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.





## RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

## STORAGE

Lyophilized protein should be stored at  $< -20^{\circ}\text{C}$ , though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at  $4-7^{\circ}\text{C}$  for 2-7 days.

Aliquots of reconstituted samples are stable at  $< -20^{\circ}\text{C}$  for 3 months.

## BACKGROUND

SCF/C-kit ligand is the ligand of the tyrosine-kinase receptor encoded by the KIT locus. 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. Promotes phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, and subsequent activation of the kinase AKT1. In phase I/II clinical studies administration of the combination of SCF and G-CSF resulted in a two- to threefold increase in cells that express the CD34 antigen compared with G-CSF alone.

## **SDS-PAGE**

