



Recombinant Protein Technical Manual

Recombinant Rat SCF/c-Kit Ligand Protein (Human Cells, His Tag)

RPES4293

Product Data:

Product SKU: RPES4293

Size: 10µg

Species: Rat

Expression host: Human Cells

Uniprot: P21581

Protein Information:

Molecular Mass: 19.4 kDa

AP Molecular Mass: 23-40 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: FPH2; KIT ligand; Kitl; KITLG; KL; Mast cell growth factor; MGF; MGFSHEP7; SCF; SFC-Kit ligand; SLF; steel factor; Stem Cell Factor; c-kit Ligand

Immunogen Information:

Sequence: Gln26-Ala189

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.