



Recombinant Protein Technical Manual

Recombinant Rat SCF/c-Kit Ligand Protein (E. coli, His Tag)

RPES3783

Product Data:

Product SKU: RPES3783

Size: 10µg

Species: Rat

Expression host: E. coli

Uniprot: P21581

Protein Information:

Molecular Mass: 19.3 kDa

AP Molecular Mass: 19.3 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

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

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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, pH7.4.

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:

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.