

## 37-1225: Human SCF / C-kit ligand Recombinant Protein (aa 1-189, His Tag)(Discontinued)

**Reactivity :** Human

**Alternative Name :** C-kit ligand Protein, DCUA Protein, FPH2 Protein, FPHH Protein, Kitl Protein, KL-1 Protein, MGF Protein, SCF Protein, SF Protein, SHEP7 Protein,

### Description

#### Source : Baculovirus-Insect Cells

Similar to Kit ligand precursor (C-kit ligand) , also known as Stem cell factor (SCF), Mast cell growth factor (MGF) or Hematopoietic growth factor KL. SCF/C-kit ligand is the ligand of the tyrosine-kinase receptor encoded by the KIT locus. This ligand is a pleiotropic factor that acts in utero in germ cell and neural cell development, and hematopoiesis, all believed to reflect a role in cell migration. In adults, it functions pleiotropically, while mostly noted for its continued requirement in hematopoiesis. SCF/C-kit ligand stimulates the proliferation of mast cells. This protein is able to augment the proliferation of both myeloid and lymphoid hematopoietic progenitors in bone marrow culture. It may act synergistically with other cytokines, probably interleukins SCF/C-kit ligand is the ligand for the tyrosine kinase receptor c-kit, which is expressed on both primitive and mature hematopoietic progenitor cells. In vitro, SCF/C-kit ligand synergizes with other growth factors, such as granulocyte colony-stimulating factor (G-CSF), granulocyte macrophage- colony- stimulating factor, and interleukin-3 to stimulate the proliferation and differentiation of cells of the lymphoid, myeloid, erythroid, and megakaryocytic lineages. In vivo, SCF/C-kit also synergizes with other growth factors and has been shown to enhance the mobilization of peripheral blood progenitor cells in combination with G-CSF. 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.

### Product Info

**Amount :** 189, His Tag)(Discontinued) / 20 µg

**Purification :** > 92 % as determined by SDS-PAGE

**Content :** Formulation Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 8.0  
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

**Storage condition :** Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

**Amino Acid :** Met1-Ala189

### Application Note

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 2-8 ng/mL. Endotoxin :< 1.0 EU per µg of the protein as determined by the LAL method. Other pack size also available.

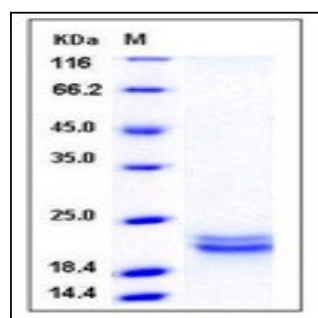


Fig 1: Human SCF / C-kit ligand Recombinant Protein (aa 1-189, His Tag)

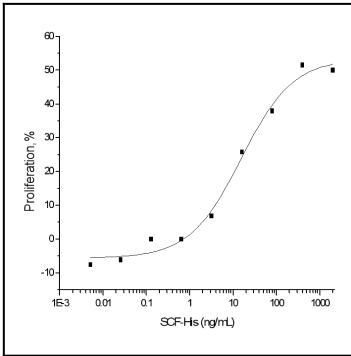


Fig 2: Human SCF / C-kit ligand Recombinant Protein (aa 1-189, His Tag) measured in a cell proliferation assay using TF-1 human erythroleukemic cells.