

## Product datasheet for TP728282L

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### **Recombinant SCF, Human**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant SCF, Human

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MEGICRNRVTNNVKDVTKLVANLPKDYMITLKYVPGMDVLPSHCWISEMVVQLSDSLTDLLDKFSNISEG LSNYSIIDKLVNIVDDLVECVKENSSKDLKKSFKSPEPRLFTPEEFFRIFNRSIDAFKDFVVASETSDCVVSSTLS

PEKDSRVSVTKPFMLPPVA with polyhistidine tag at the C-terminus

Tag: His Tag (C-term)

**Predicted MW:** The protein has a calculated MW of 19.4 kDa. The protein migrates as 21 kDa under reducing

condition (SDS-PAGE analysis).

**Purity:** >98% as determined by SDS-PAGE.

Buffer: The protein was lyophilized from a 0.2 μm filtered solution containing 1X PBS, pH 7.4.

**Bioactivity:** Measure by its ability to induce TF-1 cells proliferation. The ED $_{50}$  for this effect is <5 ng/mL.

The specific activity of recombinant human SCF is > 5 x 10<sup>5</sup> IU/mg.

**Endotoxin:**  $< 0.1 \text{ EU per 1} \mu \text{g of the protein by the LAL method.}$ 

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu g/mL$  and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P21583

Synonyms: DCUA, DFNA69, FPH2, FPHH, KL-1, Kitl, MGF, SF, SHEP7, SLF, KIT ligand

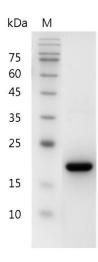




### **Summary:**

Stem Cell Factor (SCF) is a 166-amino-acid protein with a monomeric molecular weight of approximately 18.5 kDa. SCF is the ligand for the tyrosine kinase receptor c-kit, which regulates other Growth Factorss, such as granulocyte colony-stimulating factor (G-CSF), granulocyte macrophage-colony-stimulating factor (GM-CSF), and interleukin-3 to stimulate proliferation, and differentiation of hematopoietic stem cells. SCF can be produced by a variety of cells, including fibroblasts, smooth muscle, endothelial cells, mast cells and bone marrow macrophages endothelial cells.

# **Product images:**



SDS- PAGE analysis of recombinant human SCF