

**SCF/c-Kit/KIT ligand, Human, Recombinant**

Cat. No. : PCK019

**General Information**

|                        |   |
|------------------------|---|
| <b>Synonyms</b>        | DCUA;DFNA69;FPH2;FPHH;KL-1;Kitl;MGF;SF;SHEP7;SLF;KIT ligand   |
| <b>Species</b>         | Human   |
| <b>Expression host</b> | E.coli  |
| <b>Sequence</b>        | MEGICRNRVTNNVKDVTKLVANLPKDYMITLKYVPGMDVLP SHCWISEM VVQLSDSLTDLLD<br>KFSNISEGLSNYSIIDKLVNIVDDLVECVKENS SKDLKKSFKSPEPRLFTPEEFFRIFNRSIDAFKD<br>FVVASETSDCVVSSTLSPEKDSRVSVTKPFMLPPVA with polyhistidine tag at the C-terminus |
| <b>Accession</b>       | P21583.1  |
| <b>Tag</b>             | His-tag at the C-terminus   |
| <b>Mol mass</b>        | 19.4 kDa  |
| <b>Expiration date</b> | 12 months   |
| <b>Bio activity</b>    | Measure by its ability to induce TF-1 cells proliferation. The ED50 for this effect is < 5 ng/mL. The specific activity of recombinant human SCF is > 5 × 10 <sup>5</sup> IU/mg.  |

**Product feature**

|                          |  |
|--------------------------|--|
| <b>Purity</b>            | > 98% as determined by SDS-PAGE. Ni-NTA chromatography.  |
| <b>Endotoxin (EU/μg)</b> | < 0.1  |
| <b>Storage</b>           | Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°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 -5~-20°C or -80°C for 3-6 months. |
| <b>Shipping</b>          | Ice bag  |
| <b>Formulation</b>       | The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 7.4.  |
| <b>Reconstitution</b>    | It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.  |

**Background**

Stem Cell Factor (SCF) is a stromal cell-derived cytokine synthesized by fibroblasts and other cell types. SCF promotes proliferation and early differentiation of cells at the level of multipotential stem cells. SCF is a growth factor important for proliferation, and differentiation of hematopoietic stem cells. One of its roles is to change the BFU-E (burst-forming unit-erythroid) cells, which are the earliest erythrocyte precursors in the erythrocytic series, into the CFU-E (colony-forming unit-erythroid).