

## PRODUCT INFORMATION

**GMP® SCF, Human**

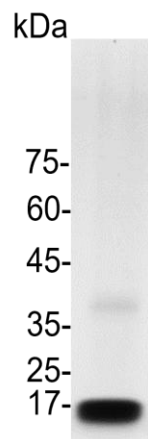
v. 250301

<b>Catalog number</b>	C01177-GMP-1000
<b>Package</b>	1 mg
<b>Description</b>	<p>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).</p>
<b>Expression System</b>	<i>Escherichia coli</i>
<b>Species of Origin</b>	Human
<b>Affinity Tag</b>	His Tag (C-term)
<b>Sequence</b>	Glu26-Ala189
<b>Endotoxin level</b>	<0.05 EU per 1 µg of the protein by the LAL method.
<b>Activity</b>	Measure by its ability to induce TF-1 cells proliferation. The ED <sub>50</sub> for this effect is <5 ng/mL. The specific activity of recombinant human SCF is > 5 x 10 <sup>5</sup> IU/mg.
<b>Purity</b>	>98% as determined by SDS-PAGE analysis.
<b>Mycoplasma</b>	Not detected
<b>Form</b>	Lyophilized
<b>Storage Buffer</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
<b>Reconstitution</b>	It is recommended to reconstitute the lyophilized protein in sterile H <sub>2</sub> O to a concentration not less than 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
<b>Stability &amp; Storage</b>	<p>This product is stable after storage at:</p> <ul style="list-style-type: none"> <li>-20°C for 12 months in lyophilized state from date of receipt.</li> <li>-20°C or -80°C for 1 month under sterile conditions after reconstitution.</li> </ul> <p>Avoid repeated freeze/thaw cycles.</p>
<b>Specification</b>	Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP-certified facility. The processes include:

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- Animal-free reagent and laboratory
  - Manufactured and tested under GMP guideline
  - Testing and traceability of raw material
  - Records of the maintenance and equipment calibration
  - Personnel training records
  - Batch-to-batch consistency
  - Documentation of QA control and process changes
  - Manufactured and tested under an ISO 13485:2016 certified quality management system
  - Stability monitor of product shelf-life
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## Reference

1. Lennartsson J, Rönstrand L. (2012) *Physiol Rev.* 92,4: 1619-49.
  2. Ian K McNiece, Robert A. Briddell. (2003) *The Cytokine Handbook* (Fourth Edition)
  3. McNiece IK, Briddell RA. (1995) *J Leukoc Biol.* 58,1: 14-22.
  4. Ashman, LK. (1999) *Int J Biochem Cell Biol.* 31,10: 1037-51.
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SDS-PAGE analysis of GMP<sup>®</sup> SCF, Human

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*For Research Use Only. Not for use in diagnostic or therapeutic procedures.*