

**TECHNICAL DATA SHEET**

**Recombinant Human SCF (Carrier-Free)**

Catalog Number: 21-9143

**RPx-Pro™ Recombinant Protein**  
**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human SCF (Carrier-Free)

**DESCRIPTION**

SCF is a hematopoietic growth factor that exerts its activity by signaling through the c-Kit receptor. SCF and c-Kit are essential for the survival, proliferation and differentiation of hematopoietic cells committed to the melanocyte and germ cell lineages. Human SCF manifests low activity on Mouse cells, while Mouse and rat SCF are fully active on human cells.

**MOLECULAR MASS**

Recombinant Human SCF is an 18.4 kDa polypeptide containing 165 amino acid residues, which corresponds to the sequence of the secreted soluble form of SCF.

**AMINO ACID SEQUENCE**

MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTDL LDKFSNISEG LSNYSIIDKL VNIVDDLVEC VKENSSKDLK KSKFSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV VSSTLSPEKD SRVSVTKPFM LPPVA

**SOURCE**

E. coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

Bacteria, Human, Human + Mouse, Leech, Monkey, Mouse, Pig, Rabbit, Rat

**BIOACTIVITY**

The ED50 as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of ≥ 5 x 105 units/mg.

**RESEARCH AREAS**

Immune System, Proliferation, Stem Cells & Differentiation, Cell Culture

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

González-Murillo, A. Development of lentiviral vectors with optimized transcriptional activity for the gene therapy of patients with Fanconi anemia. 2010. Human Gene Therapy; 21(5):623-30. Kataoka, T.R. CD72 negatively regulates KIT-mediated responses in human mast cells. 2010. The Journal of Immunology; 184(5):2468-75.

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