cellsciences.com

KITLG
Recombinant Human KIT Ligand/Stem Cell Factor

Catalog No.	CRS200A	**Quantity:**	2 µg
	CRS200B		10 µg
	CRS200C		1.0 mg
	CRS200D		500 µg

Alternate Names: KITLG,C-Kit Ligand, SCF, MGF, Steel Factor

Description: Stem cell factor (SCF), is a cytokine made by fibroblasts and endothelial cells. SCF binds to the receptor c-Kit/CD117 and plays a critical role in the maintenance, survival, and differentiation of hemaopoietic stem cells. While human SCF shows no activity on murine cells, murine and rat SCF are active on human cells.

Gene ID: 4254

UniProtKB: P21583

Source: *E. coli*

Molecular Weight: monomer, 18.6 kDa (165 aa)

Formulation: Lyophilized from a sterile filtered solution containing 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5

Purity: >95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤1 EU/µg

Biological Activity: The ED_{50} determined by a cell proliferation assay using human TF-1 cells is ≤15 ng/mL.

Specific Activity: 6.6×10^4 U/mg

Amino Acid Sequence: MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTDL LDKFSNISEG LSNYSIIDKL VNIVDDLVEC VKENSSKDLK KSFKSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV VSSTLSPEKD SRVSVTKPFM LPPVA

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to reconstitute to a recommended concentration of 0.1 mg/mL and gently pipet solution up and down sides of vial. **DO NOT VORTEX.** Allow several minutes for reconstitution. A small amount of precipitate may be seen.

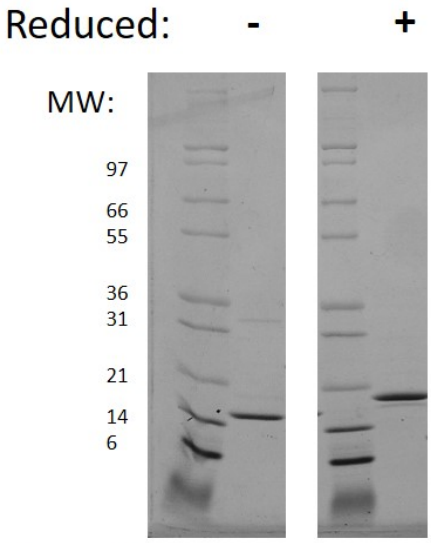
Storage & Stability: Upon receipt, store desiccated at -20 °C for up to one year. Upon reconstitution, store at 2-8 °C for up to one month. For long term storage, reconstitute in working aliquots in 0.1% BSA solution and store at -80 °C. **Avoid repeated freeze-thaw cycles.**

Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

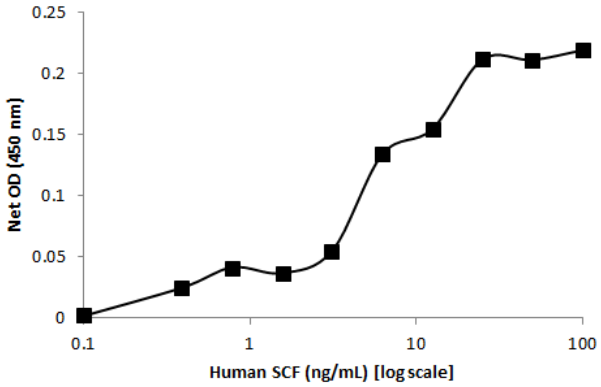
Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com

Figure: 1 µg in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue.



Human SCF induced proliferation of TF-1 cells



Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com