

KITLG

Recombinant Human KIT Ligand / Stem Cell Factor

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

Alternate Names: Kit ligand, SCF, c-Kit ligand, Mast cell growth factor, MGF

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 hematopoietic stem cells. While human SCF shows no activity on murine cells, murine and rat SCF are active on human cells.

Gene ID: 4254

UniProt ID: P21583

Source: *E. coli*

Molecular Weight: 18.6 kDa (165 aa), monomer

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 by kinetic LAL analysis

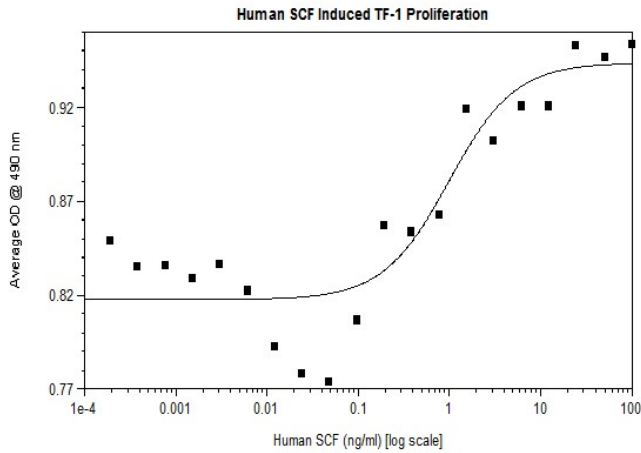
Biological Activity: ED₅₀ ≤ 15 ng/ml, determined by dose-dependent proliferation of human TF-1 cells.

Specific Activity: ≥ 6.7 x 10⁴ U/mg

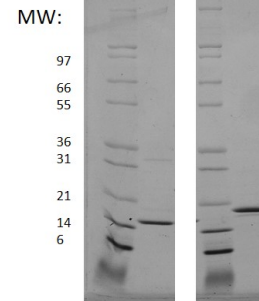
Amino Acid Sequence: MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV
VQLSDSLTDL LDKFSNISEG LSNYSIIDKL VNIVDDLVEC VKENSSKDLK
KSFKSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV VSSTLSPEKD
SRVSVTKPFM LPPVA

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.

Storage & Stability: Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.
Avoid repeated freeze-thaw cycles.



Reduced: - +



Human SCF

Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human SCF has a predicted MW of 18.6 kDa.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



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