

SCF active protein

Mouse SCF

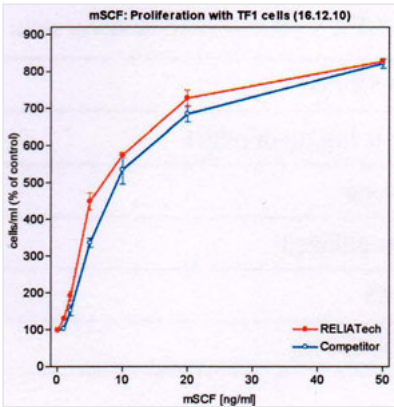
CATALOG # AAA14944	HOST E Coli	REACTIVITY Mouse
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PRODUCT SYNONYMS

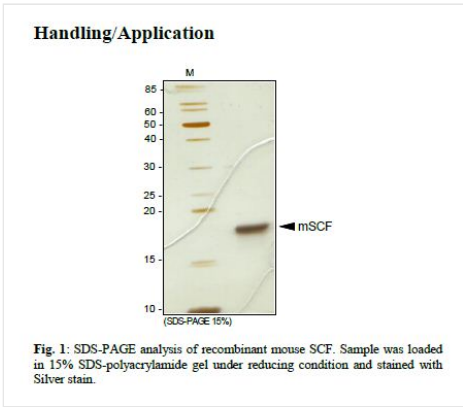
SCF; Mouse SCF; Recombinant Mouse Stem Cell Factor (SCF); Hematopoietic growth factor KL; c-Kit ligand; SCF active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Mouse
Purity/Purification	> 95% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	MKEICGNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL PSHCWLRDMV IQLSLSLTTL LDKFSNISEG LSNYSIIDKL GKIVDDL VLC MEENAPKNIK ESPKRPETRS FTPEEFSIF NRSIDAFKDF MVASDTSDCV LSSTLGPEKD SRVSVTKPFM LPPVA
Sequence Length	165
Endotoxin Level	< 0.1ng/ug of mSCF
Length (aa)	165
Biological Activity	The ED ₅₀ as determined by the dose-depend stimulation of the proliferation of the human TF-1 cell line is in the range of 2-10 ng/ml.
Buffer	0.5X PBS
Gene	Kitlg
Reconstitution	Mouse SCF should be reconstituted in 50mM acetic acid or water to a concentration of 0.1 mg/ml. This solution can be diluted in water or other buffer solutions or stored at -20 degree C.
Preparation and Storage	The lyophilized mouse SCF is best stored desiccated below 0 degree C. Freeze/thaw cycles will result in significant loss of activity. Avoid repeated freeze-thaw cycles.



Application Data
Proliferation assay with TF-1 cells.



Application Data

ADDITIONAL INFORMATION

Related Product Information for SCF active protein	Stem cell factor (SCF), also known as ckit ligand (KL), mast cell growth factor (MGF), and steel factor (SLF), is a widely expressed 28-40 kDa type I transmembrane glycoprotein. It promotes the survival, differentiation, and mobilization of multiple cell types including myeloid, erythroid, megakaryocytic, lymphoid, germ cell, and melanocyte progenitors. SCF is a primary growth and activation factor for mast cells and eosinophils. Mature mouse SCF consists of a 189 amino acid (aa) extracellular domain (ECD), a 23 aa transmembrane segment, and a 36 aa cytoplasmic tail. Proteolytic cleavage at two alternate sites in the extracellular juxtamembrane region releases a 25 kDa soluble. An alternately spliced isoform of mouse SCF lacks 28 aa that encompasses the primary proteolytic recognition site. Within the ECD of the short isoform, mouse SCF shares 93% aa sequence identity with rat SCF and 72%-75% with canine, feline, and human SCF. Rat SCF is active on mouse and human cells, but human SCF is only weakly active on mouse cells. Noncovalent dimers of transmembrane or soluble SCF interact with the receptor tyrosine kinase SCF R/ckit to trigger receptor dimerization and signaling.
Product Categories/Family for SCF active protein	Cytokines & Growth Factors
References	1. Ashman LK Int J Biochem Cell Biol 31 (1999) 2. Sette et al, Int J Dev Biol 44 (2000) 5. Kapur et al, Blood 100 (2002) 6. Wang et al, Arterioscler Thromb Vasc Biol 27 (2007) 7. Bashamboo et al, J Cell Sci 119 (2006) 10. Arakawa et al, J Biol Chem 266 (1991) 13. Flanagan et al, Cell 64 (1991) 14. Martin et al, Cell 63 (1990) 15. Lemmon et al, J Biol Chem 272 (1997)

NCBI AND UNIPROT INFORMATION

NCBI GI #	7305267
NCBI GeneID	17311
NCBI Accession #	NP_038626.1
NCBI GenBank Nucleotide #	NM_013598.2
UniProt Accession #	P20826; P97332; Q3TNJ7; Q62524; Q64222; Q921N5
Molecular Weight	18.42 kDa
NCBI Official Full Name	kit ligand
NCBI Official Synonym Full Names	kit ligand
NCBI Official Symbol	Kitl
NCBI Official Synonym Symbols	Gb; SF; Sl; Clo; Con; Mgf; SCF; SLF; blz; Kitlg; contrasted
NCBI Protein Information	kit ligand; cloud gray; C-kit ligand; Steel factor; grizzle-belly; stem cell factor; mast cell growth factor; hematopoietic growth factor KL

UniProt Protein Name	Kit ligand
UniProt Gene Name	Kitlg
UniProt Synonym Gene Names	Kitl; Mgf; Sl; Slf; MGF; SCF; SKITLG
UniProt Entry Name	SCF_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/e-coli-mouse-active-protein/scf/14944>