

c-Kit ligand/KITLG/SCF Recombinant Protein | SCF recombinant protein

Recombinant Rat c-Kit ligand/KITLG/SCF Protein

CATALOG #
AAA283384

HOST
HEK293 cells

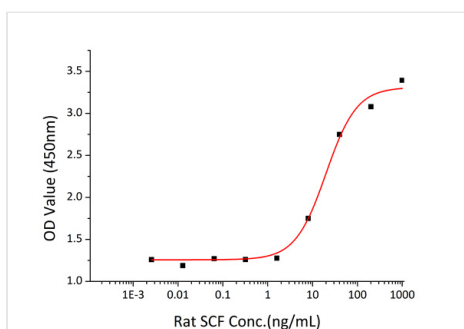
PRODUCT SYNONYMS

c-Kit ligand/KITLG/SCF; Recombinant Rat c-Kit ligand/KITLG/SCF Protein; Mgf; SCF; Kitl;c-Kit ligand; SCF recombinant protein

PRODUCT SPECIFICATIONS

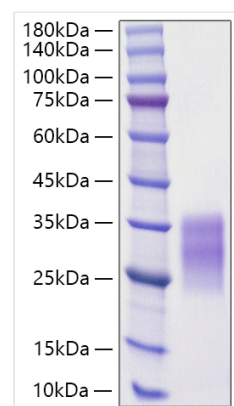
Host	HEK293 cells
Purity/Purification	>97% by SDS-PAGE.
Form/Format	Lyophilized from a 0.22 um filtered solution of PBS, pH7.4.
Sequence	QEICRNPVTD NVKDITKLVA NLPNDYMITL NYVAGMDVLP SHCWLRDMVT HLSVSLTTLL DKFSNISEGL SNYSIIDKLG KIVDDLACM EENAPKNVKE SLKKPETRNF TPEEFFSIFN RSIDAFKDFM VASDTSDCVL SSTLGPEKDS RVSVTKPFML PPVA
Species	Rat
Tag	C-His
Endotoxin	<0.01EU/ug
Bio-Activity	Measured in a cell proliferation assay using MC/9?2 mouse mast cells.The ED50 for this effect is 9.95-39.78ng/mL, corresponding to a specific activity of $2.51 \times 10^4 \sim 1.01 \times 10^5$ units/mg.
Preparation and Storage	Store at -20 degree C. Store the lyophilized protein at -20 degree C to -80 degree C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20 degree C for 3 months, at 2-8 degree C for up to 1 week.

IMAGES



Application Data

Recombinant Rat c-Kit ligand/SCF/KITLG stimulates cell proliferation of the MC/9?2 mouse mast cells.The ED50 for this effect is 9.95-39.78 ng/mL, corresponding to a specific activity of $2.51 \times 10^4 \sim 1.01 \times 10^5$ units/mg.



SDS-PAGE

Recombinant Rat c-Kit ligand/SCF/KITLG Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 25-45 kDa.

ADDITIONAL INFORMATION

Related Product Information for SCF recombinant protein	Similar to Kit ligand precursor (C-kit ligand), also known as Stem cell factor (SCF), Mast cell growth factor (MGF), or Hematopoietic growth factor KL. SCF/C-kit ligand is the ligand of the tyrosine-kinase receptor encoded by the KIT locus. This ligand is a pleiotropic factor that acts in utero in germ cell and neural cell development, and hematopoiesis, all believed to reflect a role in cell migration. In adults, it functions pleiotropically, while mostly noted for its continued requirement in hematopoiesis. SCF/C-kit ligand stimulates the proliferation of mast cells. This protein can augment the proliferation of both myeloid and lymphoid hematopoietic progenitors in bone marrow culture. It may act synergistically with other cytokines, probably interleukins SCF/C-kit ligand is the ligand for the tyrosine kinase receptor c-kit, which is expressed on both primitive and mature hematopoietic progenitor cells. In vitro, SCF/C-kit ligand synergizes with other growth factors, such as granulocyte colony-stimulating factor (G-CSF), granulocyte-macrophage colony-stimulating factor, and interleukin-3 to stimulate the proliferation and differentiation of cells of the lymphoid, myeloid, erythroid, and megakaryocytic lineages. In vivo, SCF/C-kit also synergizes with other growth factors and has been shown to enhance the mobilization of peripheral blood progenitor cells in combination with G-CSF. In phase I/II clinical studies administration of the combination of SCF and G-CSF resulted in a two- to threefold increase in cells that express the CD34 antigen compared with G-CSF alone.
Product Categories/Family for SCF recombinant protein	Cytokines & Cytokine receptors; Proteins

NCBI AND UNIPROT INFORMATION

NCBI GI #	33667068
NCBI GeneID	60427
NCBI Accession #	NP_068615.1
NCBI GenBank Nucleotide #	NM_021843.4
UniProt Accession #	P21581; Q9QWZ4; Q9Z2E7
UniProt Protein Name	Kit ligand
UniProt Gene Name	Kitlg
UniProt Synonym Gene Names	Kitl; Mgf; MGF; SCF; SKITLG
UniProt Entry Name	SCF_RAT

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.