

SCF Active Protein | KITLG active protein

SCF Protein, Human, Recombinant (aa 1-189, His Tag)

CATALOG #
AAA257884

HOST
Baculovirus-Insect Cells

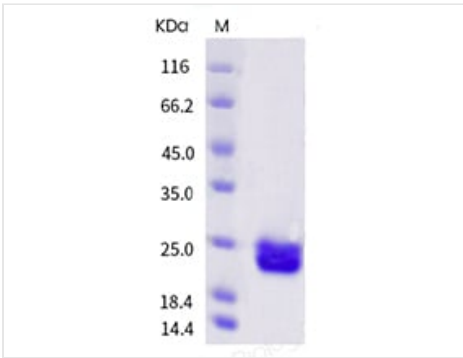
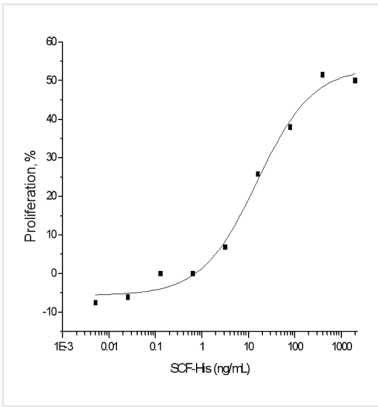
PRODUCT SYNONYMS

SCF; SCF Protein; Human; Recombinant (aa 1-189; His Tag); Human SCF/C-kit ligand Protein (aa 1-189; C-kit ligand Protein; DCUA Protein; FPH2 Protein; FPHH Protein; Kitl Protein; KL-1 Protein; MGF Protein; SF Protein; SHEP7 Protein; KIT ligand; KITLG active protein

PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells
Purity/Purification	>92% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH8.0. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Ala18 9
Species	Human
Activity	Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 1-5ng/mL.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Glu 26
Tag	C-His
Protein Construction	A DNA sequence encoding the amino acid (Met 1-Ala 189) of human SCF (P21583-1) extracellular domain was expressed, with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.

IMAGES



SDS-PAGE

Application Data
Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 1-5 ng/mL.

ADDITIONAL INFORMATION

Related Product Information for KITLG active protein	Background: 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 KITLG active protein	Cardiac Stem Cell Markers
References	McNiece IK, et al. (1995) Stem cell factor. J Leukoc Biol. 58(1): 14-22.Besmer P, et al. (1993) The kit-ligand (steel factor) and its receptor c-kit/W: pleiotropic roles in gametogenesis and melanogenesis. Dev Suppl. 1993:125-37.Mekori YA, et al. (1993) IL-3-dependent murine mast cells undergo apoptosis on removal of IL-3. Prevention of apoptosis by c-kit ligand. J Immunol. 151(7): 3775-84.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505175
NCBI GeneID	4254
NCBI Accession #	NP_000890.1
NCBI GenBank Nucleotide #	NM_000899.4
UniProt Accession #	P21583 ; Q16487 ; Q68DZ2 ; Q7M4N8 ; Q9UQK7 ; A0AV09 ; A8K2Q4 ; B7ZLM4
Molecular Weight	273
NCBI Official Full Name	kit ligand isoform b
NCBI Official Synonym Full Names	KIT ligand
NCBI Official Symbol	KITLG

NCBI Official Synonym Symbols	SF; MGF; SCF; FPH2; KL-1; Kitl; SHEP7
NCBI Protein Information	kit ligand; c-Kit ligand; steel factor; stem cell factor; mast cell growth factor; familial progressive hyperpigmentation 2
UniProt Protein Name	Kit ligand
UniProt Gene Name	KITLG
UniProt Synonym Gene Names	MGF; SCF; MGF; SCF; sKITLG
UniProt Entry Name	SCF_HUMAN

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/baculovirus-kitlg-active-protein/scf/257884>