

SCF Active Protein | KITLG active protein

SCF Protein, Mouse, Recombinant (ECD, His Tag)

CATALOG #
AAA258166

HOST
Baculovirus-Insect Cells

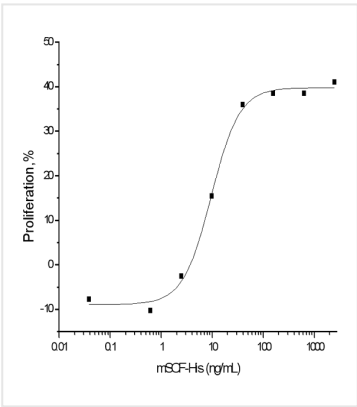
PRODUCT SYNONYMS

SCF; SCF Protein; Mouse; Recombinant (ECD; His Tag); Mouse SCF/C-kit ligand Protein (ECD; Clo Protein; Con Protein; Gb Protein; Kitlg Protein; Mgf Protein; SF Protein; Sl Protein; SLF Protein; KIT ligand; KITLG active protein

PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile 20mM Tris, 50mM NaCl, pH7.4. 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	Mouse
Activity	1. Measured by its binding ability in a functional ELISA. Immobilized mouse KITL at 2ug/ml (100uL/well) can bind mouse CD117 with a linear range of 1.28-32ng/mL. 2. Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is typically 5-30ng/mL.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Lys 26
Tag	C-His
Protein Construction	A DNA sequence encoding the amino acids (Met 1-Ala 189) of mouse KITL (P20826-1) was fused 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 typically 5-30 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 #	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	27,614 Da
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; C-kit ligand; Steel factor; cloud gray; grizzle-belly; hematopoietic growth factor KL; mast cell growth factor; stem cell factor
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://stage.aaabiotech.com/baculovirus-insect-cells-kitlg-active-protein/scf/258166>