abcam

Product datasheet

Recombinant human SCF protein ab73276

Description

Product name	Recombinant human SCF protein
Purity	> 95 % SDS-PAGE. This protein was purified by proprietary chromatographic techniques. Purity greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Expression system	Insect cells
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MEGICRNRVT NNVKDVTKLV ANLPKDYMIT LKYVPGMDVL PSHCWISEMV VQLSDSLTDL LDKFSNISEG LSNYSIIDKL VNIVDDLVEC VKENSSKDLK KSFKSPEPRL FTPEEFFRIF NRSIDAFKDF VVASETSDCV VSSTLSPEKD SRVSVTKPFM LPPVA +His Tagx6

Specifications

Our **Abpromise guarantee** covers the use of **ab73276** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Lyophilized
Additional notes	For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. pH: 7.40 Constituent: 2.68% PBS This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution	Reconstitute in sterile 18Mohm/cm water at not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

General Info

Function	Ligand for the receptor-type protein-tyrosine kinase KIT. Plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. KITLG/SCF binding can activate several signaling pathways. Promotes phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, and subsequent activation of the kinase AKT1. KITLG/SCF and KIT also transmit signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. KITLG/SCF and KIT promote activation of STAT family members STAT1, STAT3 and STAT5. KITLG/SCF and KIT promote activation of PLCG1, leading to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KITLG/SCF acts synergistically with other cytokines, probably interleukins.
Involvement in disease	Hyperpigmentation with or without hypopigmentation, familial progressive Deafness, congenital, unilateral or asymmetric
Sequence similarities	Belongs to the SCF family.
Developmental stage	Acts in the early stages of hematopoiesis.
Post-translational modifications	A soluble form (sKITLG) is produced by proteolytic processing of isoform 1 in the extracellular domain. Found in two differentially glycosylated forms, LMW-SCF and HMW-SCF. LMW-SCF is fully N-glycosylated at Asn-145, partially N-glycosylated at Asn-90, O-glycosylated at Ser-167, Thr-168 and Thr-180, and not glycosylated at Asn-97 or Asn-118. HMW-SCF is N-glycosylated at Asn-118, Asn-90 and Asn-145, O-glycosylated at Ser-167, Thr-168 and Thr-180, and not glycosylated at Asn-97. A soluble form exists as a cleavage product of the extracellular domain.
Cellular localization	Secreted; Cell membrane and Cytoplasm. Cytoplasm, cytoskeleton. Cell membrane. Cell projection, lamellipodium. Cell projection, filopodium.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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