# abcam

## Product datasheet

## Recombinant mouse SCF protein (Active) ab259390

## 画像数 4

製品の詳細

製品名 Recombinant mouse SCF protein (Active)

**生理活性** Fully biologically active when compared to standard. ED<sub>50</sub> is ≤ 2.223 ng /ml, corresponding to a

specific activity of 4.50 x 10<sup>5</sup> units/mg.

精製度 >= 95 % SDS-PAGE.

Purity by HPLC >= 95%.

**エンドトキシン・レベル** <=0.005 Eu/μg

**発現系** HEK 293 cells

アクセッション番号 <u>P20826</u>

タンパク質長 Protein fragment

Animal free Yes キャリア・フリー はい

由来 Recombinant

**生物種** Mouse

配列 KEICGNPVTD NVKDITKLVA NLPNDYMITL

NYVAGMDVLP SHCWLRDMVI QLSLSLTTLL DKFSNISEGL SNYSIIDKLG KIVDDLVLCM EENAPKNIKE SPKRPETRSF TPEEFFSIFN RSIDAFKDFM VASDTSDCVL SSTLGPEKDS

RVSVTKPFML PPV

**予測される分子量** 18 kDa

分子量情報 M+0.49 Da (calc MW 18284.51 ) (+569 Da: Hex(1)HexNAc(2))

**領域** 26 to 188

配列の追加情報 N-terminal glycine

特性

Our Abpromise guarantee covers the use of ab259390 in the following tested applications.

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

アプリケーション Functional Studies

Mass Spectrometry

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**HPLC** 

SDS-PAGE

Cell Culture

製品の状態

Lyophilized

備考

This protein is filter sterilised prior to aliquoting and lyophilisation. All aliquoting and lyophilisation steps are performed in a sterile environment

#### 前処理および保存

#### 保存方法および安定性

Shipped at Room Temperature. Store at Room Temperature.

pH: 6.00

Constituents: 0.727% Dibasic monohydrogen potassium phosphate, 0.248% Monobasic dihydrogen potassium phosphate, 10.26% Trehalose

Buffer reconstituted from

This product is an active protein and may elicit a biological response in vivo, handle with caution.

再構成

Reconstitute in PBS, aliquot and store at -80 C for 12 months or 4 C for 1 week. Avoid repeated freeze thaw. Lyophilized contents may appear as either a translucent film or a white powder. This variance does not affect the quality of the product.

#### 関連情報

#### 機能

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 PlK3R1, 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.

関連疾患

Hyperpigmentation with or without hypopigmentation, familial progressive Deafness, congenital, unilateral or asymmetric

配列類似性

Belongs to the SCF family.

発生段階

Acts in the early stages of hematopoiesis.

翻訳後修飾

A soluble form (sKITLG) is produced by proteolytic processing of isoform 1 in the extracellular domain.

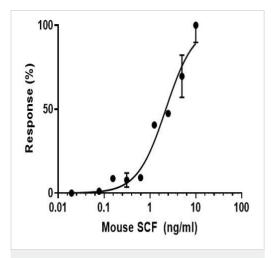
Found in two differentially glycosylated forms, LMW-SCF and HMW-SCF. LMW-SCF is fully N-glycosylated at Asn-145, partially N-glycosylated at Asn-90, O-glycosylated at Ser-167, Thr-168 and Thr-180, and not glycosylated at Asn-97 or Asn-118. HMW-SCF is N-glycosylated at Asn-118, Asn-90 and Asn-145, O-glycosylated 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.

#### 細胞内局在

Secreted; Cell membrane and Cytoplasm. Cytoplasm, cytoskeleton. Cell membrane. Cell projection, lamellipodium. Cell projection, filopodium.

## 画像



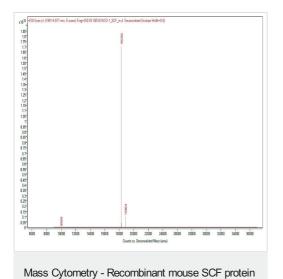
Functional Studies - Recombinant mouse SCF protein (Active) (ab259390)

Fully biologically active when compared to standard. Determined by dose-dependant stimulation of human TF-1 cells. ED $_{50}$  is  $\leq 2.223$  ng /ml, corresponding to a specific activity of 4.50 x  $10^5$  units/mg.



SDS-PAGE - Recombinant mouse SCF protein (Active) (ab259390)

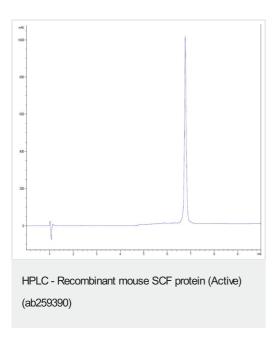
SDS-PAGE analysis of ab259390.



(Active) (ab259390)

M + 0.49 Da (calc mass 18284.51) (+569 Da: Hex(1)HexNAc(2))

The spectrum was recorded with a 6545XT AdvanceBio LC/Q-TOF (Agilent Technologies) and a MabPac RP column (42.1x50 mm, 4  $\mu$ m, Thermo Scientific). 5  $\mu$ L of purified protein was injected and the gradient run from 85 % water:FA (99.9:0.1 v/v) and 15 % acetonitrile:FA (90:9.9:0.1 v/v/v) to 55 % water:FA (99.9:0.1 v/v) and 45 % acetonitrile:FA (90:9.9:0.1 v/v/v) within 3 minutes followed by an isocratic step for another 2.5 min. Flow rate was 0.4 mL/min and the column compartment temperature was 60 °C. Data was analysed and deconvoluted using the Bioconfirm software (Agilent Technologies).



Purity: 95%

The spectrum was recorded using a 1260 Infinity II HPLC system with DAD and a MabPac RP column (3.0x100 mm, 4  $\mu$ m). 5  $\mu$ L of purified protein was injected and the gradient run from 80 % water:TFA (99.9:0.1 v/v) and 20 % acetonitrile:water:TFA (90:9.9:0.1 v/v/v) to 20 % water:TFA (99.9:0.1 v/v) and 80 % acetonitrile:water:TFA (90:9.9:0.1 v/v/v) within 3 minutes followed by an isocratic step for another 3 min. Flow rate was 0.5 mL/min and the column compartment temperature was 50 °C.

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

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