

## Product datasheet

# Recombinant rat SCF protein ab123774

### 製品の概要

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製品名	Recombinant rat SCF protein
タンパク質長	Protein fragment

### 製品の詳細

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由来	Recombinant
由来	Escherichia coli

### アミノ酸配列

アクセッション番号 [P21581](#)

生物種	Rat
分子量	18 kDa
領域	26 to 190

### 特性

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Our [Abpromise guarantee](#) covers the use of **ab123774** in the following tested applications.

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

**生理活性** The ED<sub>50</sub> as determined by the dose-dependent stimulation of the proliferation of Human MO7e cells is <10 ng/ml, corresponding to a specific activity of >1 x 10<sup>5</sup> units/mg.

**アプリケーション** Functional Studies  
SDS-PAGE  
HPLC

**精製度** > 98 % SDS-PAGE.  
Purity is greater than 98% as determined by HPLC and SDS-PAGE. Endotoxin Level: <0.1 ng/μg.

**製品の状態** Lyophilised

### 前処理および保存

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**保存方法および安定性** Shipped at 4°C. Store at -20°C. Store under desiccating conditions.  
pH: 7.50

Constituent: 0.24% Tris

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

## 再構成

Reconstitute in H<sub>2</sub>O to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers. Reconstituted SCF should be stored in working aliquots at -20°C.

## 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 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.

### 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.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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