

Product datasheet

Recombinant Rat SCF protein (Fc Chimera) ab214967

Description

Product name	Recombinant Rat SCF protein (Fc Chimera)	
Purity	> 98 % SDS-PAGE.	
Endotoxin level	< 0.060 Eu/μg	
Expression system	CHO cells	
Accession	P21581-1	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Rat	
Sequence	QEICRNPVTDNVKDITKLVANLPNDYMITLNYVAGMDVLPS HCWLRDMVT HLSVSLTLLDKFSNISEGLSNYSIDKLGKIVDDLACMEE NAPKNVKE SLKKPETRNFTPEEFFSIFNRSIDAFKDFMVASDTSDCVL SSTLGPEKDS RVSVTKPFMLPPVAASSLRNDSSSSNRKAAKSPE	
Amino acids	26 to 209	
Additional sequence information	The extracellular domain of rat SCF fused to the N-terminus of the Fc region of mouse IgG1. NCBI Accession No. AAD02827.1.	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab214967** 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

Form Lyophilized

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at -20°C long term. Avoid freeze / thaw cycle.

Constituent: 100% PBS

Reconstitution Reconstitute with PBS to 100 µg/µL. Working aliquots are stable for up to 3 months when stored at -20°C.

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"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors