9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

SCF Rat

Stem Cell Factor Rat Recombinant
GRF0373

Product Overview

Name	SCF Rat
Description	
Stem Cell Factor Rat Recombinant	
Accession (Primary)	P21581
Synonyms	
Kit ligand Precursor, C-kit ligand, SCF, Mast cell growth factor, MGF, SF, KL-1, Kitl, DKFZp686F2250, Hematopoietic growth factor KL.	
Introduction	
Stem cell factor / KIT ligand (SCF) is a cytokine which binds CD117 (c-Kit). SCF is also known as "steel factor" or "c-kit ligand". SCF exists in two forms, cell surface bound SCF and soluble (or free) SCF. Soluble SCF is produced by the cleavage of surface bound SCF by metalloproteases. SCF is a growth factor important for the survival, proliferation, and differentiation of hematopoietic stem cells and other hematopoietic progenitor cells. One of its roles is to change the BFU-E (burst-forming unit-erythroid) cells, which are the earliest erythrocyte precursors in the erythrocytic series, into the CFU-E (colony-forming unit-erythroid).	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from a concentrated (1mg/ml) solution in water containing 0.02% NaHCO3.	
Stability	
Lyophilized rat SCF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SCF should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	
Greater than 98.0% as determined by: (a) Analysis by SEC-HPLC. (b) Analysis by SDS-PAGE.	
Amino acid sequence	
MQEICRNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL PSHCWLRDMV THLSVSLTTL LDKFSNISEG	

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LSNYSIIDKL GKIVDDLVAC MEENAPKNVK ESLKKPETRN FTPEEFFSIF NRSIDAFKDF MVASDTSDCV LSSTLGPEKD SRVSVTKPFM LPPVA.

Biological Activity

The ED50 is determined by the dose-dependant stimulation of the proliferation of human TF-1 cells which is < 10 ng/ml, corresponding to a specific activity of 100,000units/mg.

Solubility

It is recommended to reconstitute the lyophilized SCF in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

SCF Rat is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P21581)