9051 Mira Mesa Blvd, #910094
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SCF Canine

Stem Cell Factor Canine Recombinant
GRF0368

Product Overview

Name	SCF Canine

Description

Stem Cell Factor Canine Recombinant

Synonyms

Kit ligand Precursor, C-kit ligand, SCF, Mast cell growth factor, MGF, SF, KL-1, Kitl, DKFZp686F2250.

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 0.2 μm filtered concentrated solution in PBS, pH 7.4.

Stability

Lyophilized 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 97.0% as determined by HPLC and SDS-PAGE.

Amino acid sequence

KGICGKRVTD DVKDVTKLVA NLPKDYKIAL KYVPGMDVLP SHCWISVMVE QLSVSLTDLL DKFSNISEGL SNYSIIDKLV KIVDDLVECT EGYSFENVKK APKSPELRLF TPEEFFRIFN RSIDAFKDLE TVASKSSECV VSSTLSPDKD SRVSVTKPFM LPPVA

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Biological Activity

Fully biologically active when compared to standard. The ED50 as calculated by the dose-dependent stimulation of the proliferation of human TF-1 cells is less than 2.0ng/ml, corresponding to a specific activity of 5,000,000IU/mg.

Solubility

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

Precautions

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