Stem cell factor (rat), (recombinant)

Stem cell factor (SCF) is a cytokine made by fibroblasts and endothelial cells. SCF binds to the receptor known as c-Kit (CD117) and is thought to play a critical role in the maintenance or survival of hematopoietic stem cells. Human SCF shows no activity on mouse cells, but mouse and rat SCF are active on human cells.

- High purity
- Carrier-free

Manuals, SDS & CofA

View Online »

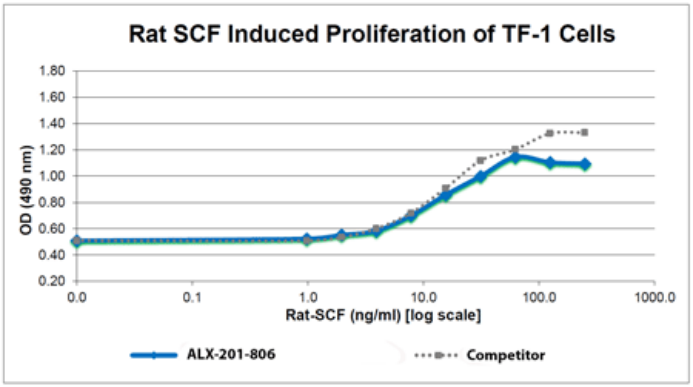


Figure 1: Rat SCF Bioactivity Data. Serial dilutions of Rat SCF, starting at 250ng/ml, were added to TF-1 cells growing in GM-SCF free media. Cell proliferation was measure after 63 hours and the linear portion of the curve was us used to calculate the ED50. The ED50 for this lot of Rat SCF was between 10-15ng/ml. This value is comparable to the typical expected range of 20-40ng/ml.

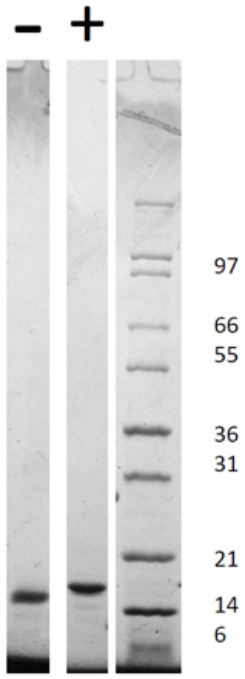


Figure 2: 1µg protein under (-) non-reducing in a 4-20% TRIS-Glycine gel, stained with Coomassie Blue. Rat SCF has a predicted MW of 18.4 kDa.

Handling & Storage

Use/Stability	It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Handling	Centrifuge the vial before opening the cap. After reconstitution, prepare aliquots and store at -20°C.
Long Term Storage	-20°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	SCF, c-Kit ligand, KL, Steel factor, MGF
Appearance	White lyophilized (freeze-dried) powder.
Biological Activity	The activity is determined by its ability to induce proliferation of TF-1 cells which is typically observed at concentrations <10ng/ml.
Endotoxin Content	≤1 EU/μg protein measured by kinetic LAL analysis.
Formulation	Lyophilized. Sterile filtered.
MW	~18.4kDa
Purity	≥98% (Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm)
Reconstitution	When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 10 mM acetic acid (AcOH) at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Source	Produced in *E. coli*. Non-glycosylated protein, containing 165 amino acids.
UniProt ID	P21581

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