

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.

Ordering Information

[Order Online »](#)

| | |
|------------------|-------|
| ALX-201-806-0002 | 2µg |
| ALX-201-806-0010 | 10µg |
| ALX-201-806-0100 | 100µg |

Manuals, SDS & CofA

[View Online »](#)

- High purity
- Carrier-free

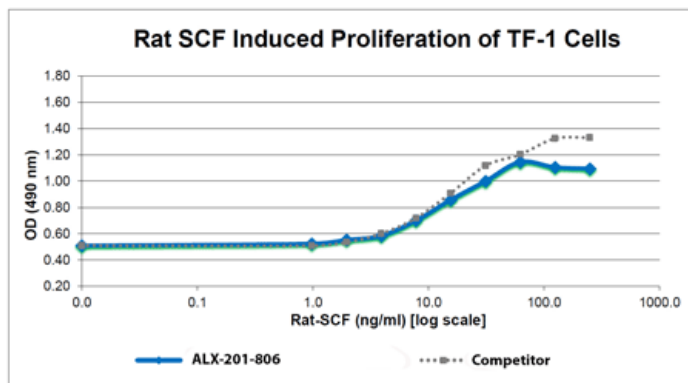


Figure 1: Rat SCF Bioactivity Data. Serial dilutions of Rat SCF, starting at 250ng/ml, were added to TF-1 cells growing in GM-SCF free media. Cell proliferation was measure after 63 hours and the linear portion of the curve was us used to calculate the ED50. The ED50 for this lot of Rat SCF was between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

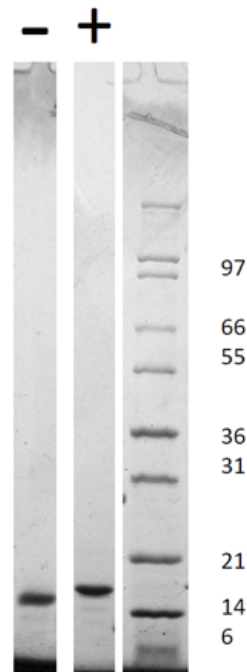


Figure 2: 1µg protein under (-) non-reducing in a 4-20% TRIS-Glycine gel, stained with Coomassie Blue. Rat SCF has a predicted MW of 18.4 kDa.

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 <i>E. coli</i> . Non-glycosylated protein, containing 165 amino acids. |
| UniProt ID | P21581 |



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