

Product: **Recombinant Mouse Stem Cell Factor / SCF**
Cat #: 300-348P
 Powder

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| Description | 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 murine cells, but murine and rat SCF are active on human cells. Alternate names: c-Kit Ligand, KL, Steel Factor, MGF |
| MW | Non-glycosylated protein, containing 164 amino acids, with a molecular weight of 18.3 kDa. |
| Physical Appearance | Sterile filtered white lyophilized (freeze-dried) powder. |
| Source | <i>E. coli</i> |
| Formulation | Recombinant mouse SCF is lyophilized from a concentrated (1 mg/mL) solution in water containing 10 mM Na ₂ PO ₄ , pH 6.5. |
| Reconstitution | Centrifuge vial before opening. 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 water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions. |
| Stability | Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage. |
| Biological Activity | The activity is determined by the dose-dependent proliferation of human TF-1 cells and is typically less than 10 ng/mL. |
| Endotoxin Level | Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein. |
| AA Sequence | KEICGNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL PSHCWLRDMV IQLSLSLTTL LDKFSNISEG LSNYSIIDKL GKIVDDL VLC MEENAPKNIK ESPKRPETRS FTPEEFFSIF NRSIDAFKDF MVASDTSDCV LSSTLGPEKD SRVSVTKPFM LPPVA |

Purity greater than 98% determined by Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!