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| Data Sheet |
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| Product Information |
| **Product Name** | **:** | **Recombinant Human Stem Cell Factor (rhSCF)** |
| **Synonyms** | **:**  | Kit ligand, |
| **Description** | **:** | Recombinant human Stem Cell Factor produced in E. coli is an 18.4 kDa protein containing 165 amino acids. SCF is a hematopoietic growth factor that exerts its activity by signaling through the c-Kit receptor. It is particularly important in the mast cell and erythroid lineages, but also acts on multipotential stem and progenitor cells, megakaryocytes, and a subset of lymphoid progenitors. SCF exists in soluble or transmembrane forms which appear to differ in function. |
| **NCBI Accession No.** | **:** | NM\_003994.5 |
| **Amino acid sequence** | **:** | **MEGICRNRVTNNVKDVTKLVANLPKDYMITLKYVPGMDVLPSHCWISEMVV****QLSDSLTDLLDKFSNISEGLSNYSIIDKLVNIVDDLVECVKENSSKDLKKS****FKSPEPRLFTPEEFFRIFNRSIDAFKDFVVASETSDCVVSSTLSPEKDSRV****SVTKPFMLPPVA** |
| **Molecular Mass** | **:** | 18.55 kDa (165 aa) |
| **Protein Tags** | **:** | No tagging |
| **Source** | **:** | *E. coli.* |
| **Cat. No.** | **:** | JW-H003-0010, JW-H003-0025, JW-H003-0050, JW-H003-0100, JW-H003-0250, JW-H003-0500, JW-H003-1000 |
| **Storage** | **:** | Should be at ≤ -70 ℃ as undiluted aliquots of handy size. Avoid repeated freezing and thawing. |
| **Cross Reactivity** | **:** | Monkey |

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| Quality Control |
| **Test items** |  | **Specifications** |
| **Appearance** | **:** | Clear, colorless liquid |
| **Purity** | **:** | Greater than 98 % by RP-HPLC and SDS-PAGE |
| **Specificity** | **:** | Using Western blot, detection |   |
| **Concentration** | **:** | 0.1 mg/㎖, Bradford method |
| **Biological Activity** | **:** | Determined by measuring the proliferation of murine TF-1 indicator cells. The ED50 is ≤ 5 ng/ml, corresponding to a specific activity of 0.2 × 105 U/mg |
| **Endotoxin** | **:** | Less than 0.2 EU/㎍ as determined by the LAL method |
| **Formulation** | **:** | 40mM Tris-acetate, 5% glycerol (pH 8.0) without preservative or carrier proteins. |
| **Stability** | **:** | Stable for up to 12 months at -70 ℃. Stable for a month at 4 ℃. |
| **Sterility** | **:** | Sterilized through a 0.2 ㎛ membrane filter and packaged aseptically. Culture for 2 weeks, no growth |
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