

# Active Recombinant Mouse Kitl

**Cat. No.** Kitl-208M    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Product Overview</b> | Recombinant mouse Stem Cell Factor (rmSCF) produced in P. pastoris is a single glycosylated polypeptide chain containing 165 amino acids.                                                                                                                                                                                                       |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>           | P.pastoris                                                                                                                                                                                                                                                                                                                                      |
| <b>Description</b>      | Stem Cell Factor (SCF) is a hematopoietic growth factor that binds to the c-Kit receptor. SCF exerts its activity during the early stages of hematopoiesis. SCF stimulates the proliferation of myeloid, erythroid, and lymphoid progenitors in bone marrow cultures and has been shown to act synergistically with colony stimulating factors. |
| <b>Form</b>             | Lyophilized after extensive dialysis against 50mM Tris, pH8.0.                                                                                                                                                                                                                                                                                  |
| <b>Bio-activity</b>     | ED50< 10.0 ng/ml, measured by a cell proliferation assay using human tf-1 cells, corresponding to a specific activity of >1.0× 10 <sup>5</sup> units/mg.                                                                                                                                                                                        |
| <b>Molecular Mass</b>   | 18.4kDa, observed by reducing SDS-PAGE.                                                                                                                                                                                                                                                                                                         |
| <b>AA Sequence</b>      | Lys26-Ala189, expressed with an N-terminal Met.                                                                                                                                                                                                                                                                                                 |
| <b>Endotoxin</b>        | < 0.2 eu/μg, determined by lal                                                                                                                                                                                                                                                                                                                  |

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|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>           | >95% by SDS-PAGE and HPLC analyses.                                                                                                                                                                                                                                                                                                                                                      |
| <b>Storage</b>          | Lyophilized recombinant protein remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rmSCF should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.                                                                                                                                                                                                |
| <b>Reconstitution</b>   | Reconstituted in ddH <sub>2</sub> O at 100 µg/ml.                                                                                                                                                                                                                                                                                                                                        |
| <b>GENE INFORMATION</b> |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Gene Name</b>        | Kitl kit ligand [ <i>Mus musculus</i> ]                                                                                                                                                                                                                                                                                                                                                  |
| <b>Official Symbol</b>  | Kitl                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Synonyms</b>         | KITL; kit ligand; cloud gray; C-kit ligand; Steel factor; grizzle-belly; stem cell factor; mast cell growth factor; hematopoietic growth factor KL; Gb; SF; Sl; Clo; Con; Mgf; SCF; SLF; Kitlg; contrasted;                                                                                                                                                                              |
| <b>Gene ID</b>          | 17311                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>mRNA Refseq</b>      | NM_013598                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Protein Refseq</b>   | NP_038626                                                                                                                                                                                                                                                                                                                                                                                |
| <b>UniProt ID</b>       | P20826                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Pathway</b>          | Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Hematopoietic cell lineage, organism-specific biosystem; Hematopoietic cell lineage, conserved biosystem; Kit Receptor Signaling Pathway, organism-specific biosystem; Melanogenesis, organism-specific biosystem; Melanogenesis, conserved biosystem; |

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**Function**

cytokine activity; growth factor activity; protein binding; stem cell factor receptor binding;

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