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| Data Sheet |
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| Product Information |
| **Product Name** | **:** | **Recombinant Human Macrophage-Colony Stimulating Factor (rhM-CSF)** |
| **Synonyms** | **:**  | Macrophage-colony-stimulating factor 1, MCSF, CSF1 |
| **Description** | **:** | Recombinant human M-CSF produced in *E. coli* is a non-glycosylated 37kDa homodimeric protein containing 159 amino acids polypeptide subunit. M-CSF, also known as CSF-1, is the primary regulator of the survival, proliferation, differentiation and function of mononuclear phagocytes. M-CSF plays important roles in innate immunity, cancer and inflammatory diseases, including systemic lupus erythematosus, arthritis, atherosclerosis and obesity. M-CSF binds to the tyrosine kinase receptor CSF-1 receptor on myeloid progenitor cells, which results in their differentiation into several cell types belonging to the mononuclear phagocyte lineage. |
| **NCBI Accession No.** | **:** | NM\_172211.3 |
| **Amino acid sequence** | **:** | **MEEVSEYCSHMIGSGHLQSLQRLIDSQMETSCQITFEFVDQEQLKDPVCYLK****KAFLLVQDIMEDTMRFRDNTPNAIAIVQLQELSLRLKSCFTKDYEEHDKACV****RTFYETPLQLLEKVKNVFNETKNLLDKDWNIFSKNCNNSFAECSSQGHERQS****EGS** |
| **Molecular Mass** | **:** | 18.5 kDa (159 aa) |
| **Protein Tags** | **:** | No tagging |
| **Source** | **:** | *E. coli.* |
| **Cat. No.** | **:** | JW-H022-0010, JW-H022-0025, JW-H022-0050, JW-H022-0100, JW-H022-0250, JW-H022-0500, JW-H022-1000 |
| **Storage** | **:** | Should be at ≤ -70 ℃ as undiluted aliquots of handy size. Avoid repeated freezing and thawing. |
| **Cross Reactivity** | **:** | Monkey, Mouse, Rat |

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| Quality Control |
| **Test items** |  | **Specifications** |
| **Appearance** | **:** | Clear, colorless liquid |
| **Purity** | **:** | Greater than 95 % by SDS-PAGE |
| **Specificity** | **:** | Using Western blot, detection | Z:\신약연구팀\배일근(20151004)\업무-my\4. 활성시험\21년\210607 hFlt3L 17 19 21 R사\hFLt3L R_21 d.jpg |
| **Concentration** | **:** | 0.1 mg/㎖, Bradford method |
| **Biological Activity** | **:** | Determined by proliferation of M-NFS-60 indicator cells The ED50 is <1.5 ng/ml, corresponding to a specific activity of > 6.0 × 105 U/mg |
| **Endotoxin** | **:** | Less than 0.5 EU/㎍ as determined by the LAL method |
| **Formulation** | **:** | PBS w/o NaCl, 5% glycerol (pH 7.4) 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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