

## Recombinant Mouse GM-CSF

Catalog No.: RP0018

### Basic Information

#### Information

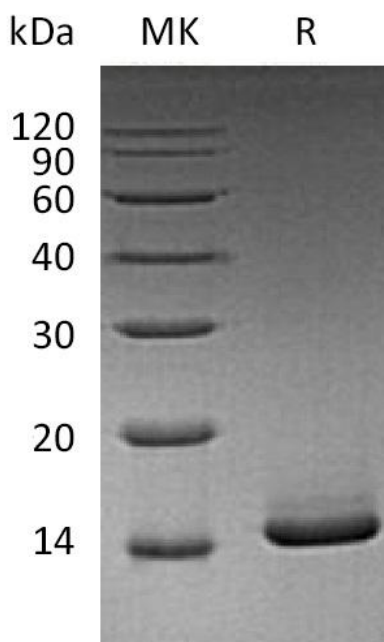
|                    |                                                                                                                                                                        |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Source             | <i>E.coli</i>                                                                                                                                                          |
| Description        | Recombinant Mouse Granulocyte-Macrophage Colony-Stimulating Factor is produced by our E.coli expression system and the target gene encoding Ala18-Lys141 is expressed. |
| Accession          | P01587                                                                                                                                                                 |
| Known As           | Granulocyte-macrophage colony-stimulating factor; Csf2; GM-CSF; Colony-stimulating factor; Csfgm                                                                       |
| Predicted Mol Mass | 14.2 KDa                                                                                                                                                               |
| Apparent Mol Mass  | 15 KDa, reducing conditions                                                                                                                                            |

#### Properties

|                |                                                                                                                                                                                                                                                                                                 |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formulation    | Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 1mM EDTA, pH 8.0.                                                                                                                                                                                                                 |
| Storage        | Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt.<br>Reconstituted protein solution can be stored at 2-8°C for 2-7 days.<br>Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.                                                             |
| Endotoxin      | < 0.01 EU/µg as determined by LAL test.                                                                                                                                                                                                                                                         |
| Reconstitution | Always centrifuge tubes before opening. Do not mix by vortex or pipetting.<br>It is not recommended to reconstitute to a concentration less than 100µg/ml.<br>Dissolve the lyophilized protein in distilled water.<br>Please aliquot the reconstituted solution to minimize freeze-thaw cycles. |
| Shipping       | The product is shipped at ambient temperature.<br>Upon receipt, store it immediately at the temperature listed below.                                                                                                                                                                           |

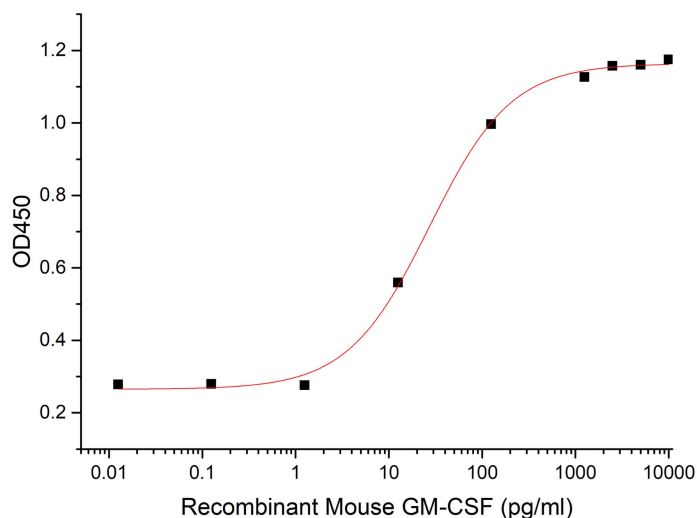
## Experimental Data

### Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

### Bioactivity-Cell Based Assay



Measured in a cell proliferation assay using FDC-P1 cells. The ED50 for this effect is 15-50 pg/ml. (QC verified)

## Background

Granulocyte-Macrophage Colony Stimulating Factor (GM-CSF) was initially characterized as a growth factor that can support the in vitro colony formation of granulocyte-macrophage progenitors. It is produced by a number of different cell types (including activated T cells, B cells, macrophages, mast cells, endothelial cells and fibroblasts) in response to cytokine of immune and inflammatory stimuli. Besides granulocyte-macrophage progenitors, GM-CSF is also a growth factor for erythroid, megakaryocyte and eosinophil progenitors. On mature hematopoietic, monocytes/ macrophages and eosinophils. GM-CSF has a functional role on nonhematopoietic cells. It can induce human endothelial cells to migrate and proliferate. Additionally, GM-CSF can also stimulate the proliferation of a number of tumor cell lines, including osteogenic sarcoma, carcinoma and adenocarcinoma cell lines.