

# Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF), Human



Cat. No. SR215-0100  
Cat. No. SR215-0020  
Cat. No. SR215-0005

Size: 100 µg  
Size: 20 µg  
Size: 5 µg

## Description

Granulocyte-macrophage colony-stimulating factor (GM-CSF), also known as colony-stimulating factor 2 (CSF2), is a monomeric glycoprotein secreted by macrophages, T cells, mast cells, natural killer cells, endothelial cells, and fibroblasts that functions as a cytokine. GM-CSF also plays a role in embryonic development by functioning as an embryokine produced by the reproductive tract.

## Expression System

*Escherichia coli*

## Sequence

APARSPSPSTQPWEHVNAIQEARLLNLSRDAAEMNETVEISEMFDLQEPTC  
LQTRLELYKQGLRGLTKLKGPLTMMASHYKQHCPPTPETSCATQIITFESKEN  
LKDFLLVIPDCWEPVQE with polyhistidine tag at the N-terminus.

## Species

Human

## Tag

polyhistidine tag at the N-terminus

## Endotoxin Level

<0.1 EU per 1 µg of the protein by the LAL method.

## Activity

Measure by its ability to induce TF-1 cells proliferation.

The ED<sub>50</sub> for this effect is <80 pg/mL.

The specific activity of recombinant human GM-CSF is approximately >1 x 10<sup>7</sup> IU/mg.

## Purity

>98% as determined by SDS-PAGE. Ni-NTA chromatography

## Formulation

The protein was lyophilized from a solution containing 1X PBS, pH 8.0.

## Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 100 µg/mL and incubate the stock solution for at least 20 minutes to ensure sufficient re-dissolved.

## Storage

Lyophilized protein should be stored at -20°C.

This product is stable for one year upon receipt, when handled and stored as instructed.

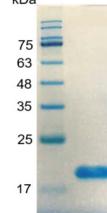
Upon reconstitution, protein aliquots should be stored at -20°C or -80°C.

Avoid repeated freeze/thaw cycles.

## Note

Please use within one month after protein reconstitution.

kDa



SDS-PAGE analysis of recombinant human GM-CSF

## Related Ordering Information

| Cat. No.   | Description                                  | Size   |
|------------|--|--------|
| CC103-0500 | DMEM, High Glucose                           | 500 ml |
| CC109-0500 | RPMI 1640                                    | 500 ml |
| CC113-0500 | DMEM/F-12                                    | 500 ml |
| PC203-0600 | 60mm Tissue Culture Dish, with Gripping Ring | 600 ea |
| PC273-0100 | 75T Flask, Plug Seal Cap                     | 100 ea |

## Caution

- During operation, always wear a lab coat, disposable gloves, and protective equipment.
- Research Use Only. Not intended for any animal or human therapeutic or diagnostic uses.