

# Human GM-CSF Protein

HA210236



**Product name:** Human GM-CSF Protein

**Species reactivity:** Human

**Background:** 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. The pharmaceutical analogs of naturally occurring GM-CSF are called sargramostim and molgramostim.

**Purity:** > 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

**Endotoxin:** Less than 1EU per  $\mu\text{g}$  by the LAL method.

**Source:** Recombinant Human GM-CSF Protein is expressed from E.coli without tag. It contains Ala18-Glu144.[Accession | P04141]

**Formulation:** Lyophilized from 0.22 $\mu\text{m}$  filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

**Storage:** -20 to -80 $^{\circ}\text{C}$  for 12 months as supplied from date of receipt.  
-20 to -80 $^{\circ}\text{C}$  for 3-6 months in unopened state after reconstitution.  
2-8 $^{\circ}\text{C}$  for 2-7 days after reconstitution.  
Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Hangzhou Huaan Biotechnology Co., Ltd.

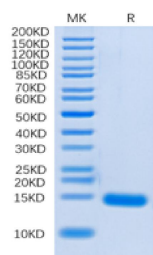
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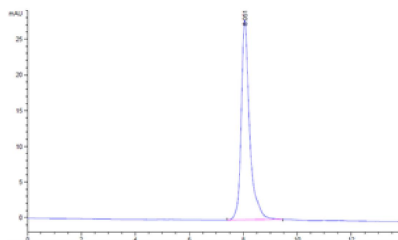
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation



**Fig1:** Recombinant GM-CSF on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.



**Fig2:** The purity of Human GM-CSF is greater than 95% as determined by SEC-HPLC.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

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