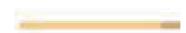


# CHAMOT

重组人粒细胞-巨噬细胞集落刺激因子 /Recombinant  
GM-CSF, Human, Animal-Free

CM115-5HP



CM115-20HP



CM115-100HP



CM115-500HP



CM115-1000HP



CHAMOT

乔默®生物

Specialize In Cytokines

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## 重组人粒细胞-巨噬细胞集落刺激因子 / Recombinant GM-CSF, Human, Animal-Free

产品编号	CM115-5HP	CM115-20HP	CM115-100HP	CM115-500HP	CM115-1000HP
规格	5 µg	20 µg	100 µg	500 µg	1 mg

### 产品简介

<b>背景描述</b>	Granulocyte-macrophage colony-stimulating factor (GM-CSF) was first identified as a Growth Factors due to its ability to induce proliferation and differentiation of bone marrow progenitors into granulocytes and macrophages. GM-CSF is produced by multiple cell types including activated T cells, B cells, macrophages, endothelial cells and fibroblasts upon receiving immune stimuli. GM-CSF stimulates stem cells to produce granulocytes and monocytes functions as a cytokine.
<b>别称</b>	granulocyte-macrophage colony-stimulating factor, colony stimulating factor 2, CSF2, CSF-2
<b>蛋白编码</b>	P04141
<b>分子量</b>	The protein has a calculated MW of 15.4 kDa. The protein migrates as 15 kDa under reducing condition (SDS-PAGE analysis).
<b>表达系统</b>	Escherichia coli
<b>纯度</b>	>98% as determined by SDS-PAGE and SEC-HPLC.
<b>生物活性</b>	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.
<b>内毒素检测</b>	<0.1 EU per 1 µg of the protein by the LAL method.
<b>蛋白序列</b>	APARSPSPSTQPWEHVNAIQEARLLNLSRDTAAEMNETVEVISEMFDLQEPTCLQTRLELYKQ GLRGSLTKLKGPLTMMASHYKQHCPPTPETSCATQITFESFKENLKDFLLVIPFDCWEPVQE with polyhistidine tag at the N-terminus.
<b>产品形式</b>	The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 8.0. If you have any concerns or special requirements, please confirm with us.
<b>产品应用</b>	Cell Culture

## 产品使用

### 1. Before opening, centrifuge at 3000 rpm for 5 mins.

### 2. Initial Reconstitution

- Reconstitute the Lyophilized Protein in sterile H<sub>2</sub>O to a concentration of 100-200 µg/mL.
- Then, incubate it at room temperature for at least 20 mins to ensure sufficient dissolution.  
*Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.*
- Store at 2°C to 8°C for up to 1 week.

### 3. Extended Storage

- After the initial reconstitution, further dilute the reconstituted protein in a buffer containing a carrier protein or stabilizer (e.g., 0.1% BSA, 10% FBS, 5% HSA, or 5% trehalose solution). The final concentration is not less than 10 µg/ml.
- Prepare aliquots ( $\geq 20 \mu\text{l}$ ).
- Store at -20°C or -80°C for 3 to 6 months.

*Avoid repeated freeze-thaw cycles.*

## 产品储存/运输

**Lyophilized Protein:** Store at -20°C for 1 year.

### 储存

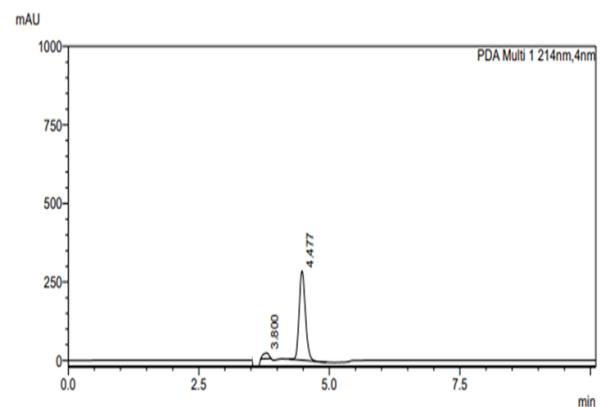
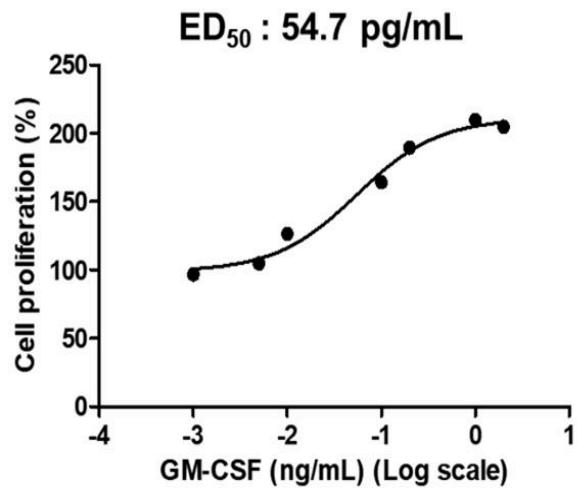
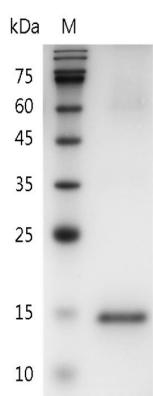
**Initial Reconstitution:** Store at 2°C to 8°C for up to 1 week.

**Extended Storage:** Store at -20°C or -80°C for 3 to 6 months with a carrier protein or stabilizer.

### 运输

Blue Ice

## 实验数据展示



SDS-PAGE  
analysis of  
recombinant  
human GM-CSF

Human GM-CSF, His Tag, E. coli induced TF-1 cell  
proliferation, with the ED<sub>50</sub> at 54.7 pg/mL.

The purity of recombinant human GM-CSF is greater  
than 98% as determined by SEC-HPLC.

For Research Use or Further Manufacturing Only  
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