

## CSF2

### Recombinant Human GM-CSF / CSF2, Endotoxin Free

<b>Catalog No.</b>	CRO504A CRO504B CRO504C CRO504D	<b>Quantity:</b>	10 µg 50 µg 1 mg 100 µg
<b>Alternate Names:</b>	Granulocyte macrophage colony-stimulating factor, GMCSF, CSF2, Pluripoietin-alpha		
<b>Description:</b>	Granulocyte macrophage colony-stimulating factor (GM-CSF) is a hematopoietic growth factor produced by various cell types such as T and B cells, macrophages, endothelial cells and fibroblasts, in response to cytokine or inflammatory stimuli. GM-CSF stimulates the development of granulocytes and macrophages, and the proliferation and development of erythroid, megakaryocyte and eosinophil progenitors. It also enhances functional activity of mature hematopoietic cells. GM-CSF is of great clinical value in reconstitution of the hematopoietic system following cancer therapy or bone marrow transplantation.		
<b>UniProt ID:</b>	P04141		
<b>Gene ID:</b>	1437		
<b>Source:</b>	<i>Oryza sativa</i> , suspension culture void of any human, animal or viral contaminants that could jeopardize stem cell culture.		
<b>Molecular Weight:</b>	14 kDa (127 aa), without glycosylation 26 kDa, with glycosylation		
<b>Formulation:</b>	Lyophilized from sterile filtered PBS, pH 7.2		
<b>Purity:</b>	> 95% by SDS-PAGE gel analysis.		
<b>Endotoxin Level:</b>	< 0.005 ng per µg (0.05 EU/µg) as measured by kinetic LAL assay		
<b>Biological Activity:</b>	ED <sub>50</sub> < 0.2 ng/ml, determined by dose-dependent proliferation of TF-1 cells		
<b>Specific Activity:</b>	> 5.0 x 10 <sup>6</sup> U/mg		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 µg/ml. The solution can be further diluted into aliquots in aqueous buffers. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). <b>Please note that the addition of any carrier protein into this product may introduce endotoxin. Depending upon the particular application employed, this may be undesirable.</b>		
<b>Storage &amp; Stability:</b>	The lyophilized protein, though stable at room temperature for few weeks, is best stored at -20°C to -80°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C to -80°C. <b>Avoid repeated freeze-thaw cycles.</b>		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.