

Animal, Bacterial & Viral Free - Low Endotoxin - Ultra Pure - High BioActivity
CSF2

Recombinant Human Granulocyte-Macrophage Colony Stimulating Factor, CSF2, Endotoxin Free

Catalog No.	CRO504A CRO504B CRO504C CRO504D	Quantity:	10 µg 50 µg 1 mg 100 µg
Alternate Names:	GMCSF, GM-CSF, CSF2, Pluripoietin-alpha		
Description:	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.		
Gene ID:	1437		
UniProtKB:	P04141		
Source:	Recombinant Human GM-CSF is produced in rice suspension cells tissue of <i>Oryza sativa</i> , that is void of any human or animal viral contaminants that could jeopardize stem cell culture.		
Molecular Weight:	Recombinant human GM-CSF contains 127 aa with no amino acid tag. MW is 14 kDa without glycosylation, and about 26 kDa with glycosylation.		
Formulation:	Lyophilized from PBS, pH 7.2, sterile filtered through a 0.2 µm filter.		
Purity:	> 95% by SDS-PAGE gel analysis.		
Endotoxin Level:	Endotoxin level is less than 0.005 ng per µg (0.05 EU/µg) as measured by kinetic LAL assay.		
Biological Activity:	ED ₅₀ < 0.2 ng/ml, for the dose-dependent effect of human GM-CSF on proliferation of TF-1 cells.		
Specific Activity:	> 5.0 x 10 ⁶ U/mg		
Reconstitution:	Centrifuge vial prior to opening. 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). 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.		
Storage & Stability:	The lyophilized protein, though stable at room temperature for few weeks, is best stored at -20°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.		

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



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