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Product datasheet for TP723720

GM CSF (CSF2) (NM_000758) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human colony stimulating factor 2 (granulocyte-macrophage) (CSF2)
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Human GM-CSF, the region of Ala18- Glu144, from gene Accession# NM_000758
Tag:	Tag Free
Predicted MW:	14.5 kDa
Concentration:	lot specific
Purity:	>98%, as determined by Coomassie stained SDS-PAGE.
Buffer:	1 x PBS
Bioactivity:	The ED50 is 0.10- 0.30 ng/ml, corresponding to a specific activity of 1 - 0.33 X10^7 units/mg, determined by a dose dependent TF-1 cell proliferation.
Endotoxin:	Less than 0.01 ng per μg protein as determined by the LAL method
Storage:	Store at -80°C.
Stability:	Unopened vial can be stored between 2°C and 8°C for up to 2 weeks, at -20°C for up to 6 months, or at -70°C or below until the expiration date. Aliquots can be stored between 2°C and 8°C for up to one week and stored at -20°C or colder for up to 3 months. Avoid repeated freeze/thaw cycles.
RefSeq:	NP_000749
Locus ID:	1437
UniProt ID:	P04141
RefSeq Size:	800
Cytogenetics:	5q31.1
RefSeq ORF:	432
Synonyms:	CSF; GMCSF

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Summary: The protein encoded by this gene is a cytokine that controls the production, differentiation, and function of granulocytes and macrophages. The active form of the protein is found extracellularly as a homodimer. This gene has been localized to a cluster of related genes at chromosome region 5q31, which is known to be associated with interstitial deletions in the 5q- syndrome and acute myelogenous leukemia. Other genes in the cluster include those encoding interleukins 4, 5, and 13. This gene plays a role in promoting tissue inflammation. Elevated levels of cytokines, including the one produced by this gene, have been detected in SARS-CoV-2 infected patients that develop acute respiratory distress syndrome. Mice deficient in this gene or its receptor develop pulmonary alveolar proteinosis. [provided by RefSeq, Aug 2020]

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein

Protein Pathways: Cytokine-cytokine receptor interaction, Fc epsilon RI signaling pathway, Hematopoietic cell lineage, Jak-STAT signaling pathway, Natural killer cell mediated cytotoxicity, T cell receptor signaling pathway