

Product datasheet for DA3505X

GM-CSF Human Protein

Product data:

Product Type: Recombinant Proteins

Description: GM-CSF human recombinant protein, 5 µg

Species: Human **Expression Host:** Insect **Predicted MW:** 14.6 kDa

Purity: >98% pure by SDS-PAGE and visualised by silver stain.

Buffer: Presentation State: Purified

State: Lyophilized without preservatives and stabilizers

Buffer System: PBS

Bioactivity: Biological: Human GM-CSF is fully biologically active when compared to standards.

> Measured in a cell proliferation assay using TF-1 human erythroleukemic cells [Kitamura T et al, | Cell Physiol, 1989]. The ED50 for this effect is typically < 0.1ng/ml corresponding to a

specific activity of $\ge 1 \times 10^7$ units/mg.

Endotoxin: < 0.1 ng per µg of GM-CSF

Reconstitution Method: The lyophilized GM-CSF is soluble in water and most aqueous buffers.

> The lyophilized powder can be reconstituted in water to a concentration of 0.1 mg/ml. This solution can be diluted into other buffered solutions or stored at -20°C for future use.

Lyophilized without preservatives and stabilizers Preparation:

Protein Description: Recombinant human GM-CSF.

Store lyophilized at 2-8°C for 6 months or at -20°C long term. Storage:

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: NP 000749

Locus ID: 1437 **UniProt ID:** P04141 Cytogenetics: 5q31.1



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Synonyms: CSF; GMCSF

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

Product images:

