

## **Product datasheet for TP721106**

## OriGene Technologies, Inc.

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## 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: HEK293

Expression cDNA Clone

or AA Sequence:

Ala18-Glu144

Tag: C-His

Predicted MW: 15.5 kDa

Concentration: lot specific

**Purity:** >95% as determined by SDS-PAGE and Coomassie blue staining

Buffer: Provided lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM NaCl

Endotoxin: Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg)

**Reconstitution Method:** Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the

lyophilized protein in ddH2O. It is not recommended to reconstitute a concentration less than 100 µg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Storage: Store at -80°C.

**Stability:** Stable for at least 6 months from date of receipt under proper storage and handling

conditions.

**RefSeq:** <u>NP 000749</u>

 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