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# Product datasheet for TP311109M

## GM CSF (CSF2) (NM_000758) Human Recombinant Protein

### Product data:

| | |
|---|---|
| **Product Type:** | Recombinant Proteins |
| **Description:** | Recombinant protein of human colony stimulating factor 2 (granulocyte-macrophage) (CSF2), 100 µg |
| **Species:** | Human |
| **Expression Host:** | HEK293T |
| **Expression cDNA Clone or AA Sequence:** | >RC211109 protein sequence<br>Red=Cloning site Green=Tags(s)<br><br>MWLQSLLLLGTVACSISAPARSPSPSTQPWEHVNAIQEARRLLNLSRDTAAEMNETVEVISEMFDLQEPT CLQTRLELYKQGLRGSLTKLKGPLTMMASHYKQHCPPTPETSCATQIITFESFKENLKDFLLVIPFDCWE PVQE<br><br>TRTRPLEQKLISEEDLAANDILDYKDDDDKV |
| **Tag:** | C-Myc/DDK |
| **Predicted MW:** | 14.4 kDa |
| **Concentration:** | >0.05 µg/µL as determined by microplate BCA method |
| **Purity:** | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| **Buffer:** | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol |
| **Preparation:** | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps. |
| **Note:** | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| **Storage:** | Store at -80°C. |
| **Stability:** | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| **RefSeq:** | NP_000749 |
| **Locus ID:** | 1437 |
| **UniProt ID:** | P04141 |

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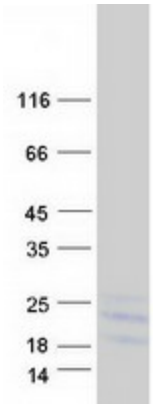
| | |
|---|---|
| **RefSeq Size:** | 800 |
| **Cytogenetics:** | 5q31.1 |
| **RefSeq ORF:** | 432 |
| **Synonyms:** | CSF; GMCSF |
| **Summary:** | The protein encoded by this gene is a cytokine that controls the production, differentiation, and function of granulocytes and macrophages. The active form 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:




Coomassie blue staining of purified CSF2 protein (Cat# [TP311109]). The protein was produced from HEK293T cells transfected with CSF2 cDNA clone (Cat# [RC211109]) using MegaTran 2.0 (Cat# [TT210002]).