

## **Product datasheet for PH311109**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## GM CSF (CSF2) (NM\_000758) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** CSF2 MS Standard C13 and N15-labeled recombinant protein (NP\_000749)

Species:HumanExpression Host:HEK293

Expression cDNA Clone

RC211109

or AA Sequence:

**Predicted MW:** 16.3 kDa

Protein Sequence: >RC211109 protein sequence

Red=Cloning site Green=Tags(s)

MWLQSLLLLGTVACSISAPARSPSPSTQPWEHVNAIQEARRLLNLSRDTAAEMNETVEVISEMFDLQEPT CLQTRLELYKQGLRGSLTKLKGPLTMMASHYKQHCPPTPETSCATQIITFESFKENLKDFLLVIPFDCWE

PVQE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

**Storage:** Store at -80°C. Avoid repeated freeze-thaw cycles.

**Stability:** Stable for 3 months from receipt of products under proper storage and handling conditions.

**RefSeq:** NP 000749

RefSeq Size: 800 RefSeq ORF: 432

Synonyms: CSF; GMCSF

Locus ID: 1437 UniProt ID: <u>P04141</u>





Cytogenetics:

5q31.1

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]

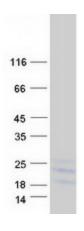
**Protein Families:** 

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]).