

**HUMAN GM-CSF PROTEIN, HFC TAG****Cat.#:** 11365**Product Name:** Human GM-CSF Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** CSF;GMCSF**Target:** GM-CSF**UNIPROT ID:** P04141**Description:** Recombinant Human GM-CSF Protein with C-terminal human Fc tag

**Background:** 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]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 40.6 kDa after removal of the signal peptide. The apparent molecular mass of GM-CSF-hFc is approximately 35-70 kDa due to glycosylation.

**Molecular Characterization:** GM-CSF(Ala18-Glu144) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

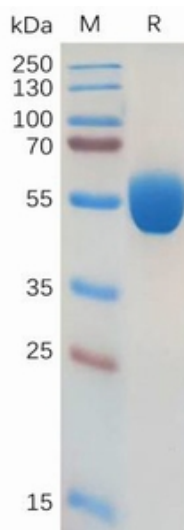


Figure 1. Human GM-CSF Protein, hFc Tag on SDS-PAGE under reducing condition.

## Human GM-CSF, hFc Tagged protein ELISA

0.2 µg of Human GM-CSF, hFc tagged protein per well

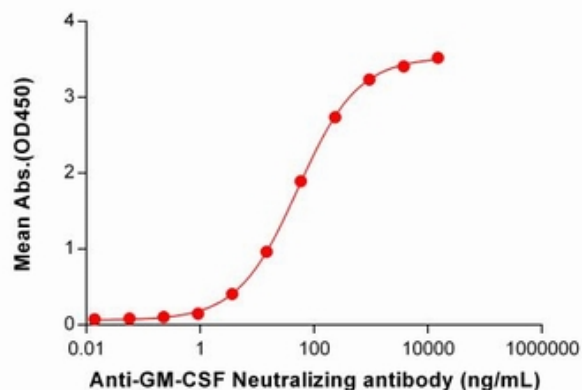


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human GM-CSF Protein, hFc Tag (11365) can bind Anti-GM-CSF Neutralizing antibody 28125 in a linear range of 0.92-937.50 ng/mL.