

## HUMAN M-CSF PROTEIN, HFC TAG

**Cat.#:** 11350

**Product Name:** Human M-CSF Protein

**Size :** 10 µg, 50 µg and 100 µg

**Synonyms:** CSF-1;MCSF

**Target:** M-CSF

**UNIPROT ID:** P09603

**Description:** Recombinant Human M-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 macrophages. The active form of the protein is found extracellularly as a disulfide-linked homodimer, and is thought to be produced by proteolytic cleavage of membrane-bound precursors. The encoded protein may be involved in development of the placenta. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2011]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 51.3 kDa after removal of the signal peptide. The apparent molecular mass of M-CSF-hFc is approximately 55-70 kDa due to glycosylation.

**Molecular Characterization:** M-CSF(Glu33-Arg255) 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.

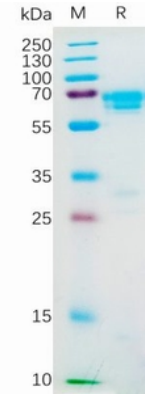


Figure 1. Human M-CSF Protein, hFc Tag on SDS-PAGE under reducing condition.

## Human M-CSF, hFc tagged protein ELISA

0.2  $\mu$ g of Human CSF1R, His tagged protein per well

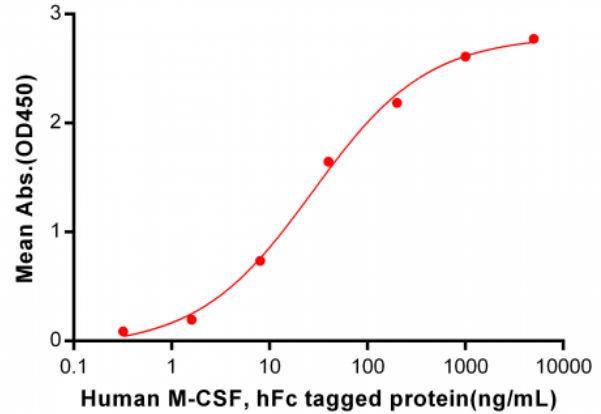


Figure 2. ELISA plate pre-coated by 2  $\mu$ g/ml (100  $\mu$ l/well) Human CSF1R, His tagged protein 11190 can bind Human M-CSF, hFc Tagged protein 11350 in a linear range of 0.32-200 ng/ml.

## Human M-CSF, hFc Tagged protein ELISA

0.2  $\mu$ g of Human M-CSF, hFc tagged protein per well

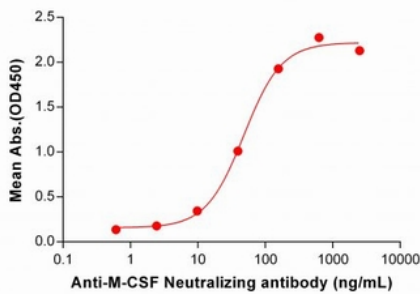


Figure 3. ELISA plate pre-coated by 2  $\mu$ g/ml (100  $\mu$ l/well) Human M-CSF Protein, hFc Tag (11350) can bind Anti-M-CSF Neutralizing antibody 28104 in a linear range of 9.77-156.25 ng/mL.

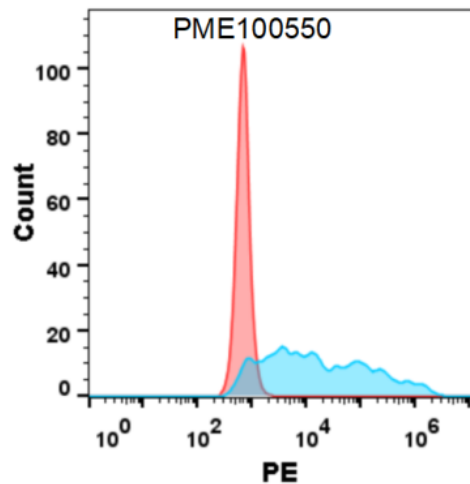


Figure 4. Flow cytometry analysis with 1  $\mu$ g/ml Human M-CSF Protein, hFc tag (11350) on Expi293 cells transfected with human CSF1R (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).