



# Recombinant Protein Technical Manual

## Recombinant Rat M-CSF/CSF1 Protein

RPES0456

### Product Data:

**Product SKU:** RPES0456

**Size:** 10µg

**Species:** Rat

**Expression host:** Human cells

**Uniprot:** Q8JZQ0

### Protein Information:

**Molecular Mass:** 25.2 kDa

**AP Molecular Mass:** 25.2 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg as determined by LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Macrophage colony-stimulating factor 1; CSF; M-CSF; MCSF; CSF1

## Immunogen Information:

**Sequence:** Gln33-Arg254

## Background:

Rat Macrophage colony-stimulating factor 1(MCSF,CSF1) is a single-pass type I membrane cytokine. It is a hematopoietic growth factor that plays an essential role in the regulation of survival, proliferation and differentiation of hematopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. MCSF promotes the release of proinflammatory chemokines, and thereby plays an important role in innate immunity and in inflammatory processes. It is involved in the regulation of osteoclast proliferation and differentiation, the regulation of bone resorption, and is required for normal bone development which for normal male and female fertility. It promotes reorganization of the actin cytoskeleton, regulates formation of membrane ruffles, cell adhesion and cell migration. MCSF also plays a role in lipoprotein clearance.