

## Recombinant Rat M-CSF

Catalog No.: RP0070

### Basic Information

#### Information

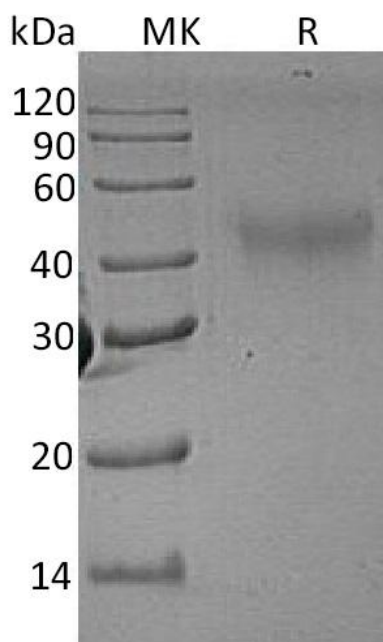
<b>Source</b>	<i>Human Cells</i>
<b>Description</b>	Recombinant Rat Macrophage Colony-stimulating Factor 1 is produced by our Mammalian expression system and the target gene encoding Glu33-Arg254 is expressed.
<b>Accession</b>	Q8JZQ0
<b>Known As</b>	Macrophage colony-stimulating factor 1; CSF-1; M-CSF; MCSF; CSF1
<b>Predicted Mol Mass</b>	25.2 KDa
<b>Apparent Mol Mass</b>	46 KDa, reducing conditions

#### Properties

<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
<b>Storage</b>	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
<b>Endotoxin</b>	< 1 EU/µg as determined by LAL test.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

## Experimental Data

### Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

## 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.