

## Recombinant Rat M-CSF/CSF1 Protein

**Catalog Number:** PKSR030451

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

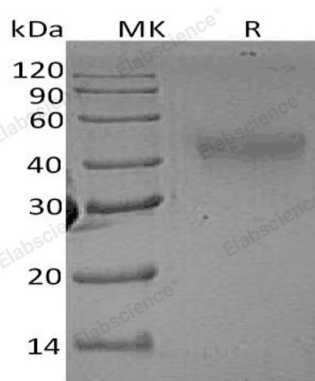
### Description

<b>Species</b>	Rat
<b>Source</b>	HEK293 Cells-derived Rat M-CSF/CSF1 protein Glu33-Arg254
<b>Calculated MW</b>	25.2 kDa
<b>Observed MW</b>	46 kDa
<b>Accession</b>	Q8JZQ0
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual.

### Data



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### Background

Rat Macrophage colony-stimulating factor 1 (M-CSF, 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. M-CSF 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. M-CSF also plays a role in lipoprotein clearance.

### For Research Use Only