## Recombinant Rat M-CSF Protein (Sumo Tag)



## **RPES8248**

## **Product Information**

Product SKU: Tag:	RPES8248 N-Sumo	Expression Host: Reactivity:	E.coli Rat		Size: Accession:	20µg Q8JZQ0	
Additional Information							
Calculated MW	<b>/:</b> 37.3 kDa	Obse	erved MW:	42 kDa			
Sequence:	Glu33-Arg25	54					

## **Protein Information**

Background: Macrophage colony-stimulating factor 1, also known as CSF-1, M-CSF, Lanimostim and CSF1, is a single-pass membrane protein which is disulfide-linked as a homodimer or heterodimer. Granulocyte / macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. M-CSF/CSF-1 is known to facilitate monocyte survival, monocyte-to-macrophage conversion, and macrophage proliferation. M-CSF/CSF-1 is a secreted cytokine which influences hemopoietic stem cells to differentiate into macrophages or other related cell types. It binds to the Colony stimulating factor 1 receptor. M-CSF/CSF-1 may also be involved in development of the placenta. The active form of M-CSF/CSF-1 is found extracellularly as a disulfide-linked homodimer, and is thought to be produced by proteolytic cleavage of membrane-bound precursors. M-CSF/CSF-1 induces cells of the monocyte/macrophage lineage. It also plays a role in immunological defenses, bone metabolism, lipoproteins clearance, fertility and pregnancy. Upregulation of M-CSF/CSF-1 in the infarcted myocardium may have an active role in healing not only through its effects on cells of monocyte/macrophage lineage, but also by regulating endothelial cell chemokine expression.

Synonyms:	Macrophage colony-stimulating factor, CSF-1, Macrophage colony-stimulating factor		
	1, MCSF, M-CSF, Csfm, Csf1		
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method		
Formulation:	Lyophilized from a 0.2 $\mu m$ filtered solution in PBS with 5% Trehalose and 5% Mannitol.		
Purity:	> 90% as determined by reducing SDS-PAGE.		
<b>Bio-Activity</b> :	Not validated for activity		
Storage:	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 $< -20^{\circ}$ C for 3 months.		