Recombinant Rat M-CSF Protein (Trx Tag)



RPES8247

Product Information

Product SKU: RPES8247 Expression Host: E.coli Size: 20μg

Tag: N-Trx Reactivity: Rat Accession: Q8JZQ0

Additional Information

Calculated MW: 44.3 kDa Observed MW: 44 kDa

Sequence: Glu33-Arg254

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 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.

Purity: > 90% as determined by reducing SDS-PAGE.

Bio-Activity: 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°C for 3 months.