

## Recombinant Human M-CSF protein(His Tag)

Catalog Number: PKSH034163

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

### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human M-CSF protein Glu 33-Gln 181, with an C-terminal His
<b>Calculated MW</b>	13.3 kDa
<b>Observed MW</b>	13-26 kDa
<b>Accession</b>	P09603
<b>Bio-activity</b>	Measure by its ability to induce proliferation in NFS-60 cells. The ED <sub>50</sub> for this effect is <1 ng/mL. The specific activity of recombinant human M-CSF is approximately >2.5x 10 <sup>8</sup> IU/mg.

### Properties

<b>Purity</b>	> 98 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.1 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 sterile PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Background

Macrophage Colony-Stimulating Factors (m-csf) 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. CSF-1 promotes the release of proinflammatory chemokines, and thereby plays an important role in innate immunity and in inflammatory processes. It also plays an important role in the regulation of osteoclast proliferation and differentiation, the regulation of bone resorption, and is required for normal bone development. CSF-1 is required for normal male and female fertility and promotes reorganization of the actin cytoskeleton, regulates formation of membrane ruffles, cell adhesion and cell migration. It also plays a role in lipoprotein clearance.

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