

## Human CellExp™ M-CSF, Human Recombinant

|                         |   |         |
|-------------------------|---|---------|
| <b>CATALOG #:</b>       | 6455-10   | 10 µg   |
|                         | 6455-50   | 50 µg   |
|                         | 6455-250  | 250 µg  |
|                         | 6455-1000   | 1000 µg |
| <b>ALTERNATE NAMES:</b> | Macrophage Colony Stimulating Factor, CSF-1, Lanimostim, MCSF, MGC31930, M-CSF. |         |
| <b>SOURCE:</b>          | HEK 293 cells (Glu 33 – Arg 255)  |         |
| <b>PURITY:</b>          | > 95% by SDS - PAGE   |         |
| <b>MOL. WEIGHT:</b>     | 35 - 45 kDa, glycosylated   |         |
| <b>FORM:</b>            | Lyophilized   |         |
| <b>FORMULATION:</b>     | Lyophilized from 0.22 µm filtered PBS (pH 7.4) with 5% trehalose.               |         |

**MOL. WEIGHT:** This protein has 223 amino acids (Glu 33 - Arg 255) with a 6x-His tag at C-terminus, and a calculated MW of 26 kDa. The protein migrates to 35-45 kDa under reducing and non-reducing conditions (SDS-PAGE) due to glycosylation.



N-terminus

C-terminus

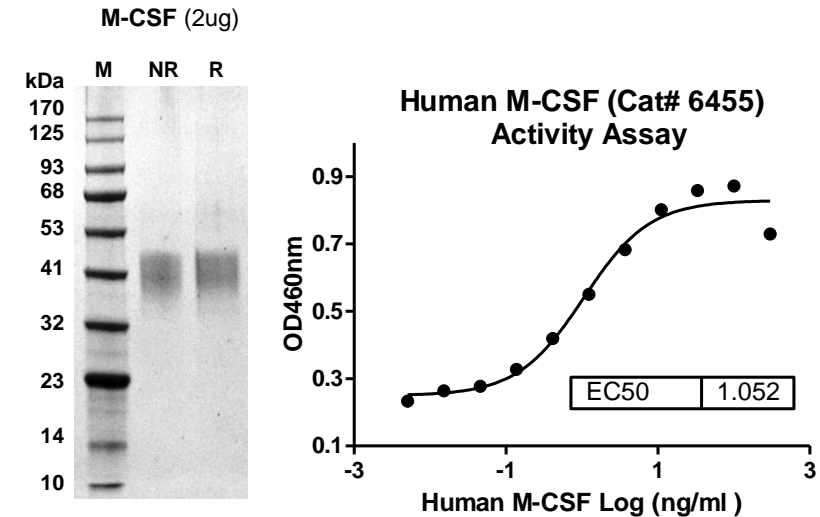
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, the solution can be stored at 2-8°C for up to 1 month. For extended storage, aliquot and store at -20°C and use within 3 months. Avoid repeated freeze-thaw cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS (pH 7.4). Do not vortex.

### DESCRIPTION:

Granulocyte/Macrophage Colony-Stimulating Factors (M-CSF) are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of granulocytes and monocytes-macrophages. M-CSF plays an essential role in the regulation of survival, proliferation and differentiation of hematopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. It also plays an important role in innate

immunity and in inflammatory processes by promoting the release of proinflammatory chemokines. M-CSF is also required for normal bone development and male/female fertility.



**Figure Legend: (Left) SDS-PAGE (4-20%) of Recombinant M-CSF:** Recombinant protein is loaded under reducing conditions and non-reducing conditions, then stained with Coomassie Blue. It migrates as 35-45 kDa due to glycosylation. **(Right) BIOLOGICAL ACTIVITY of M-CSF:** The EC<sub>50</sub> is typically 0.5 to 4 ng/mL for this protein with specific activity determined by the dose dependent stimulation of the proliferation of murine M-NFS-60 cells (Mouse Myeloid Leukemia indicator cell line) using BioVision's Quick Cell Proliferation colorimetric Assay Kit Plus (BioVision Cat No. K302).

### RELATED PRODUCTS:

- Quick Cell Proliferation colorimetric Assay Kit Plus (Cat # K302)
- Human CellExp™ G-CSF, Human Recombinant (Cat # 6453-10, -50)
- Human CellExp™ GM-CSF, Human Recombinant (Cat # 6454-10, -50)
- G-CSF, human recombinant (Cat # 4094-10, -50, -1000)
- G-CSF, murine recombinant (Cat # 4095-10, -50, -1000)
- GM-CSF, murine recombinant (Cat # 4101-10, -100, -1000)
- GM-CSF, Rat recombinant (Cat # 4102-10, -100, -1000)
- G-CSF Antibody (Cat # 5094R-100)
- G-CSF Blocking Peptide (Cat # 5094RBP-50)

**FOR RESEARCH USE ONLY! Not to be used in humans.**