GMP Grade, Recombinant Human M-CSF

Cat#: C-BETA015

Size: 100μg, 1mg

Source: *Escherichia coli.*

Product Information

Molecular Weight: Approximately 18.5kDa, a single non-glycosylated polypeptide chain containing 159 amino acids.

Description : Accession # NP_757350.2, Glu33-Ser190, with an N terminal Met.

SDS-PAGE: 18.5 kDa, under reducing conditions, 37 kDa, non-reducing conditions

Purity: > 95 %, as determined by SDS-PAGE, under reducing non-reducing conditions, visualized by coomassie staining.

Endotoxin: Less than 0.01 EU/μg of M-CSF as determined by kinetic Limulus Amoebocyte Lysate (LAL) assay.

Biological Activity: Recombinant human M-CSF bioactivity is measured by RAW264.7 cells, the EC50 for this effect is 59.90 to 182.0 ng/mL.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2 μm filtered concentrated solution in PBS with trehalose.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute to a concentration of 0.1-1.0 mg/mL in **sterile distilled H_2O**. Stock solutions should be apportioned into working aliquots and stored at-20°C to -70°C. Further dilutions should be made in appropriate buffered solutions. **Do not reconstitute in cell culture media directly**.

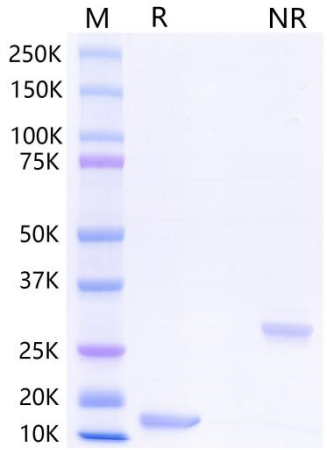
Shipping: 2°C to 8°C. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. A minimum of 12 months from date of shipping when stored at -20°C to -70°C as supplied. 4 weeks at 2°C to 8°C under sterile conditions after reconstitution. 4 months at -20°C to -70°C under sterile conditions after reconstitution

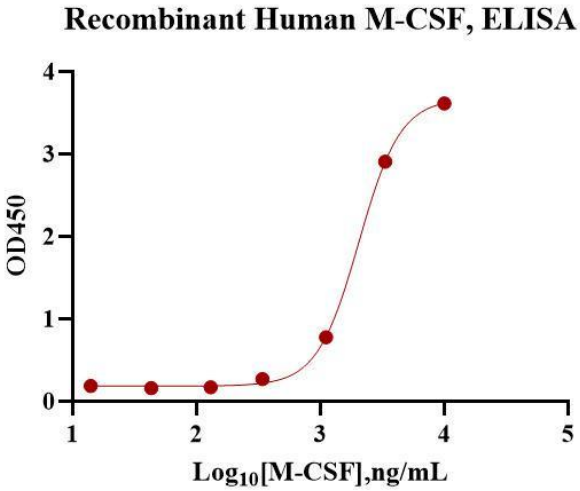
Usage: Biogradetech M-CSF product can be used for a variety of ex vivo cell culture applications such as research or further manufacturing.

Quality statement: No animal- or human-derived materials were used for the manufacture of this product, unless otherwise stated in the respective Certificate of Origin.

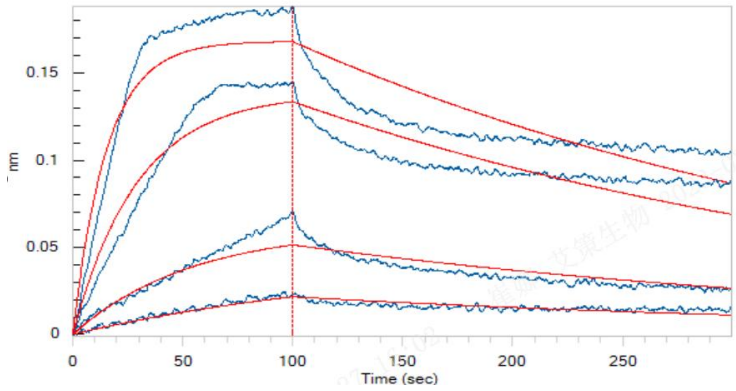
DATA



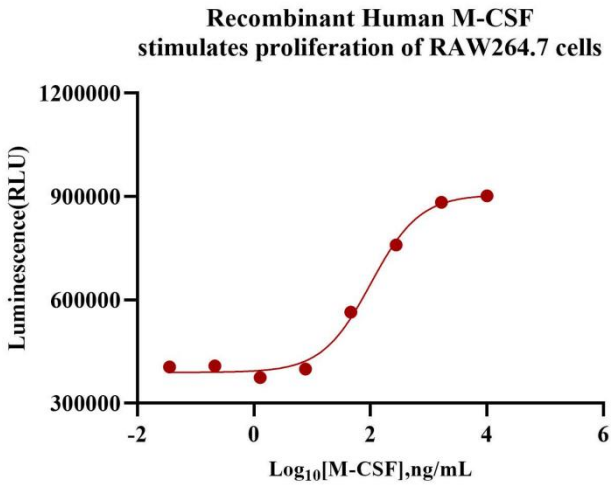
SDS-PAGE: Recombinant Human M-CSF Protein SDS-PAGE 1 μg/lane of Recombinant Human M-CSF(Catalog# C-BETA015) was resolved with SDS-PAGE under reducing (R) conditions visualized by coomassie staining showing a single band at 18 kDa and non-reducing (NR) conditions visualized by coomassie staining showing a single band at 32 kDa.



Bioactivity-ELISA: Immobilized Recombinant Human M-CSF(Catalog# C-BETA015) at 0.2 μg/well can bind Human M-CSF R with a linear range of 1892 to 2202 ng/mL.



Bioactivity-BLI: Loaded Human M-CSF R, can bind Recombinant Human M-CSF (Catalog# C-BETA015) with an affinity constant of 2.7 nM as determined in BLI assay (Octet®R8).



Bioactivity-Cell based assay: Recombinant Human M-CSF (Catalog# C-BETA015) stimulates proliferation of RAW264.7 cells, the EC50 for this effect is 59.90 to 182.0 ng/mL.

References

1. Motoyoshi K. Biological activities and clinical application of M-CSF. Int J Hematol. 1998 Feb;67(2):109-22.

2. Bourette RP, Rohrschneider LR. Early events in M-CSF receptor signaling. Growth Factors. 2000;17(3):155-66.

Note:

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.