

## Datasheet: PMP80

**BATCH NUMBER 17011**

<b>Description:</b>	RECOMBINANT MOUSE M-CSF
<b>Name:</b>	M-CSF
<b>Other names:</b>	MACROPHAGE COLONY-STIMULATING FACTOR
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	10 µg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Functional Assays	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified recombinant protein - lyophilized
<b>Reconstitution</b>	Reconstitute with 100 µl distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.
<b>Preparation</b>	Purified recombinant M-CSF expressed in <i>E.coli</i>
<b>Preservative Stabilisers</b>	None present
<b>Endotoxin Level</b>	< 1.0 EU/ug
<b>Approx. Protein Concentrations</b>	0.1 mg/ml

**External Database  
Links**

**UniProt:**

[P07141](#)   [Related reagents](#)

**Entrez Gene:**

[12977](#)   Csf1   [Related reagents](#)

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**Synonyms**      Csfm

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**Product Information**      M-CSF (macrophage colony-stimulating factor) is a potent lineage restricted hematopoietic growth factor and member of the CSF family of hormone-like glycoproteins, which plays a key role in the regulation of cellular differentiation, proliferation, and the survival of blood monocytes, tissue macrophages and their progenitor cells.

Along with sRANKL/CD254/OPGL, M-CSF is essential for osteoclastogenesis, acting through the tyrosine kinase receptor c-fms (colony stimulating factor 1 receptor). A genetic defect in M-CSF is responsible for osteopetrosis in mice (op/op), which are severely deficient in mature macrophages and have a restricted capacity for bone remodeling.

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**Protein Molecular Weight**      36.4 kDa (156 amino acid homodimer)

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**Activity**      The ED<sub>50</sub> was determined by the dose-dependent stimulation of the proliferation of murine M-NFS-60 cells is < 1.0 ng/ml, corresponding to a specific activity of > 1 x 10<sup>6</sup> units/mg.

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**Purity**      %98 by SDS PAGE and HPLC analysis

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**Storage**      Prior to reconstitution store at +4°C.  
After reconstitution store at -20°C.  
Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**      3 months from date of reconstitution

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**Health And Safety Information**      Material Safety Datasheet documentation #10268 available at:  
<https://www.bio-rad-antibodies.com/SDS/PMP80>  
10268

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**Regulatory**      For research purposes only

**North & South America**      Tel: +1 800 265 7376

Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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