

**Product:** Granulocyte Macrophage Colony Stimulating Factor (GM-CSF), murine  
**Catalog #:** 11-GMCSF-M  
**Amount:** 5 µg

---

**DESCRIPTION:** Recombinant Murine GM-CSF (rmGM-CSF)  
rmGM-CSF is a single, non-glycosylated, polypeptide chain containing 125 amino acids and having a molecular mass of 14285.35 Dalton.  
The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Pro-Thr-Arg  
*Escherichia coli* expression system

**SOURCE:** *Escherichia coli* expression system

**MOLECULAR WEIGHT:** 14 kDa

**PURITY:** > 98%, as determined by:  
(a) Analysis by RP-HPLC.  
(b) Anion-exchange FPLC  
(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel

**ENDOTOXIN:** Less than 0.1 ng/µg (IEU/µg) of rmGM-CSF

**DIMERS & AGGREGATES:** Less than 1% as determined by silver stained SDS-PAGE gel analysis

**PROTEIN CONTENT:** Protein quantitation was carried out by 2 independent methods:  
- UV spectroscopy at 280 nm using the absorbency value of 0.765 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENcomputer analysis program of protein sequences  
- Analysis by RP-HPLC, using a standard solution of mGM-CSF as a Reference Standard

**FORM:** Purified, in 20mM AcOH (acetic Acid)containing 0.1% BSA

**CONCENTRATION:** 0.1 mg/ml

**STORAGE:** -20°C (aliquot), avoid freezing and thawing cycles

**BIOLOGICAL ACTIVITY:** rmGM-CSF is fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of the proliferation of murine FDC-P1 cell line is < 0.2 ng/ml, corresponding to a Specific Activity of 5x10<sup>6</sup> IU/mg

This product is sold for laboratory research use or further manufacturing only and should not be used for human therapeutic or diagnostic applications. The information presented is believed to be accurate; however, said information and products are offered without warranty or guarantee since the ultimate conditions of use and the variability of the materials treated are beyond our control. Nothing disclosed herein is to be construed as a recommendation to use our products in violation of any patents. Under no circumstances shall ARP American Research Products, Inc. be liable for damages, whether consequential, compensatory, incidental or special, strict liability or negligence, breach of warranty or any other theory arising out of the use of the products available from ARP American Research Products, Inc. Nothing contained herein warrants that the use of the products will not infringe on the claims of any patents covering the product itself or the use thereof in combination with other products or in the operation of any process.