

Product Data Sheet

Recombinant Mouse GM-CSF (carrier-free)

Catalog # / Size: 576302 / 10 µg
576304 / 25 µg
576306 / 100 µg
576308 / 500 µg

Source: Mouse GM-CSF, amino acids Ala18-Lys141 (Accession # NM_009969) was expressed in *E. coli*.

Molecular Mass: The 125 amino acid N-terminal methionylated recombinant protein has a predicted molecular mass of 14.2 kDa. The DTT-reduced protein migrates at approximately 13 kDa and the non-reduced protein migrates at approximately 11kDa by SDS-PAGE.

Purity: Purity is >98%, as determined by Coomassie stained SDS-PAGE.

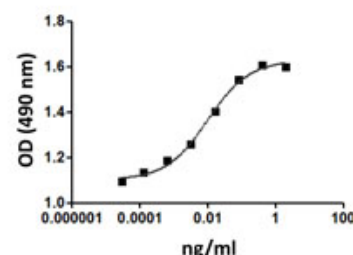
Endotoxin Level: Endotoxin level is <0.1 EU/µg (<0.01ng/µg) protein as determined by the LAL method.

Activity: The ED₅₀ is <0.05 ng/ml, corresponding to a specific activity >2x10⁷ units/mg.

Preparation: 10-100µg sizes are bottled at 200µg/ml. 500µg and larger sizes are bottled at the concentration indicated on the vial.

Formulation: 0.22 µm filtered protein solution is in 10mM NaH₂PO₄, 150mM NaCl, pH 7.2.

Storage: Unopened vial can be stored at 4°C for three months, at -20°C for six months, or at -70°C for one year. For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10µg/mL in buffer containing carrier protein such as 1% BSA or HSA or 10% FBS. For long term storage, aliquot into polypropylene vials and store in a manual defrost freezer. **Avoid repeated freeze/thaw cycles.**



FDC-P1 cell proliferation induced by mouse GM-CSF.

Applications:

Applications: Bioassay

Recommended Usage: Use when high specific biological activity is required.

Application Notes: The protein showed bioactivity when tested on MC/9 cells in proliferation assay. Please contact Technical Service for details.

Application References: 1. Ahn J, *et al.* 2012. *PNAS*. 109:19386. PubMed
2. Verhagen J, *et al.* 2012. *PNAS*. 110:E221. PubMed

Description: GM-CSF is a hematopoietic factor that is produced by T cells, macrophages, fibroblasts and endothelial cells. This multifunctional cytokine stimulates progenitor cells of neutrophils, eosinophils and macrophages. GM-CSF is also a differentiation and activating factor for granulocytic and monocytic cells.

Antigen References: 1. Fitzgerald K, *et al.* Eds. 2001. *The Cytokine FactsBook*. Academic Press San Diego.
2. Demetri G, *et al.* 1991. *Blood* 78:2791.
3. Fan D, *et al.* 1991. *In vivo* 5:571.
4. Negrin R, *et al.* 1992. *Adv. Pharmacol.* 23:263.



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