

Human Granulocyte Macrophage Colony Stimulating Factor (rDNA derived) Reference standard

Cat. No. CSF2-92H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	This Standard is the primary biological standard for GM- CSF.
Species	Human
Enzyme Unit	The assigned potency is 10,000 International Units of biological activity per ampoule.
Usage	No attempt should be made to weigh out any portion of the freeze-dried material prior to reconstitution. Dissolve the total contents of the ampoule in 0.5ml of sterile distilled water. Rinse the ampoule with about 0.4ml of sterile phosphate buffered saline (PBS) and make up the total volume to 1.0ml with PBS. This solution will contain GM-CSF at a concentration of 10,000 International Units/ml. Use carrier protein where extensive dilution is required
Notes	This preparation is not for administration to humans. The preparation contains material of human origin, and either the final product or the source materials, from which it is derived, have been tested and found negative for HBsAg, anti-HIV and HCV RNA. As with all materials of biological origin, this preparation should be regarded as potentially hazardous to health. It should be used and discarded according to your own laboratorys safety procedures. Such safety procedures should include the wearing of protective gloves and avoiding the generation of aerosols. Care should be exercised in opening ampoules or vials, to avoid cuts.
Stability	Reference materials are held at Creative Biomart within assured, temperature-

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

controlled storage facilities and they should be stored on receipt as indicated on the label. Accelerated degradation studies have indicated that this material is suitably stable, when stored at -20°C or below, for the assigned values to remain valid until the material is withdrawn or replaced. These studies have also shown that the material is suitably stable for shipment at ambient temperature without any effect on the assigned values. Once reconstituted, diluted or aliquoted, users should determine the stability of the material according to their own method of preparation, storage and use. Users who have data supporting any deterioration in the characteristics of any reference preparation are encouraged to contact Creative Biomart.

Storage

For economy of use, it is recommended that the solution be sub divided into several small aliquots and stored at -40°C or below. Avoid repeated thawing/freezing. Unopened ampoules should be stored at -20°C. Please note: because of the inherent stability of lyophilized material, Creative Biomart may ship these materials at ambient temperature.

GENE INFORMATION

Gene Name	CSF2 colony stimulating factor 2 (granulocyte-macrophage) [Homo sapiens];
Official Symbol	CSF2
Synonyms	CSF2; colony stimulating factor 2 (granulocyte-macrophage); granulocyte-macrophage colony-stimulating factor; GM CSF; GMCSF; granulocyte macrophage colony stimulating factor; molgramostin; sargramostim; CSF; colony-stimulating factor; granulocyte-macrophage colony stimulating factor; MGC131935; MGC138897;
Gene ID	1437
mRNA Refseq	NM_000758

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Protein Refseq	NP_000749
MIM	138960
UniProt ID	P04141
Chromosome Location	5q23-q31
Pathway	Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem; Calcineurin-regulated NFAT-dependent transcription in lymphocytes, organism-specific biosystem; Calcium signaling in the CD4+ TCR pathway, organism-specific biosystem; Cytokine Signaling in Immune system, organism-specific biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem;
Function	cytokine activity; granulocyte macrophage colony-stimulating factor receptor binding; growth factor activity; protein binding;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA