

Datasheet for 010-001-314**GM-CSF Mouse Recombinant Protein****Overview**

Description:	GM-CSF Mouse Recombinant Protein - 010-001-314
Item No.:	010-001-314
Size:	20 µg
Applications:	SDS-PAGE
Origin:	Mouse
Expressed in:	E. coli

Product Details

Background:	M-GM-CSF is produced in response to a number of inflammatory mediators by mesenchymal cells present in the hemopoietic environment and at peripheral sites of inflammation. GM-CSF is able to stimulate the production of neutrophilic granulocytes, macrophages, and mixed granulocyte-macrophage colonies from bone marrow cells and can stimulate the formation of eosinophil colonies from fetal liver progenitor cells. GM-CSF can also stimulate some functional activities in mature granulocytes and macrophages. GM-CSF receptors shows significant homologies with other receptors for hematopoietic growth factors, including IL2 -beta, IL-3, IL-6, IL-7, EPO and the Prolactin receptors. Recombinant mouse GM-CSF produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 125 amino acids and having a molecular mass of 14,285.35 Daltons.
Synonyms:	Granulocyte Macrophage Colony Stimulating Factor, Granulocyte Macrophage-CSF, Granulocyte-macrophage colony-stimulating factor; GM-CSF cytokine; Colony-stimulating factor; CSF; CSF2; Sargramostim; Molgramostin
Species of Origin:	Mouse
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Csf2
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Purity/Specificity:	Purity greater than 95% as determined by analysis by RP-HPLC and reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - Q14AD9 • NCBI

Application Details

Tested Applications:	SDS-PAGE
Application Note:	GM-CSF protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-GM-CSF in immunological assays. Lyophilized in 10 mM acetic Acid.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Biological Activity: GM-CSF activity is determined by the dose-dependent proliferation of mouse FDCP-1 cell line and is typically less than 10 pg/mL. Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein.

Formulation

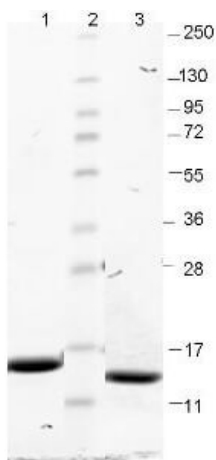
Physical State:	Lyophilized
Concentration:	0.1 mg/mL by UV absorbance at 280 nm
Buffer:	See application note.
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	20 μ l (20-200 μ l)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiration: Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE using Rockland's Recombinant Mouse GM-CSF Protein shows bands corresponding to GM-CSF (1 μ g) in lane 3 (unreduced, arrowhead) and lane 1 (reduced). Molecular weight estimation was made by comparison to prestained MW markers, lane 2.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.