Datasheet for 010-001-U93-0010

rMouse G-CSF Protein

Overview

Description:	Mouse Granulocyte Colony Stimulating Factor Recombinant Protein - 010-001-U93-0010
Item No.:	010-001-U93-0010
Size:	10 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Mouse
Expressed in:	E. coli

Product Details

Background:	Granulocyte Colony-Stimulating Factor, or G-CSF, is a growth factor that is considered the most potent inducer of terminal differentiation to granulocytes and macrophages of leukemic myeloid cell lines. The synthesis of G-CSF can be induced by bacterial endotoxins, TNF, IL-1 and GM-CSF. Prostaglandin E2 inhibits the synthesis of G-CSF, while in epithelial, endothelial, and fibroblastic cells secretion of G-CSF is induced by IL-17. Human and mouse G-CSF are cross-reactive. Recombinant mouse G-CSF is a non-glycosylated protein, containing 179 amino acids, with a molecular weight of 19 kDa.
Synonyms:	CSF-3, MGI-1G, GM-CSFβ, pluripoietin
Species of Origin:	Mouse
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Csf3
Purity/Specificity:	Granulocyte Colony Stimulating Factor purity was determined to be greater than 98% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P09920

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Granulocyte Colony Stimulating Factor Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Granulocyte Colony Stimulating Factor in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is determined by the dose-dependent proliferation of mouse M-NFS-60 cells and is typically less than 10-60 ng/mL.

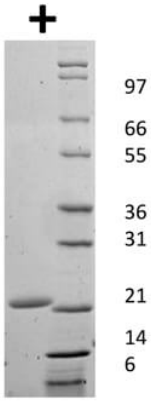
Formulation

Physical State:	Lyophilized
Buffer:	0.01 M Sodium Citrate, pH 3.0
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	10µl (10-100µl)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

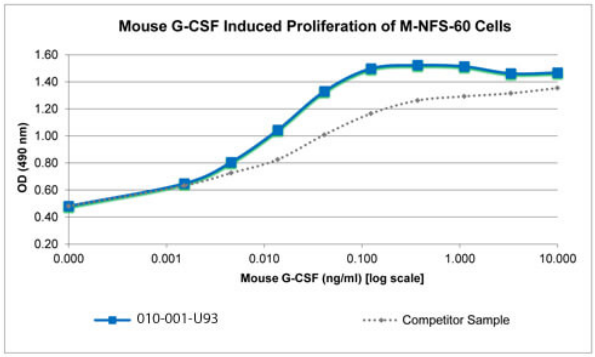
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results 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 of Mouse Granulocyte Colony Stimulating Factor Recombinant Protein. Lane 1: 1 µg Mouse G-CSF in reducing conditions (+). Lane 2: Molecular weight marker. Mouse G-CSF has a predicted MW of 19 kDa.



SDS-PAGE

Bioactivity of Mouse Granulocyte Colony Stimulating Factor Recombinant Protein. Serial dilutions of Mouse G-CSF, starting at 10 ng/mL, were added to NFS-60 cells. After 69 hours, cell proliferation was measured and the linear portion of the curve was us used to calculate the ED50. The ED50 of Murine G-CSF is 8-12 pg/mL. This value is comparable with the typical expected range of 10-60 pg/mL.

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