



Granulocyte Macrophage-Colony Stimulating Factor Human Recombi-

Item Number	rAP-2158
Synonyms	CSF-2, MGI-1GM, GM-CSF, Pluripoietin-alpha, Molgramostin, Sargramostim, MGC131935, MGC138897.
Description	GM CSF Human Recombinant produced in CHO cells is a 14.6kDa globular protein consisting of 127 amino acids, having two intramolecular disulfide bonds and two N-linked glycosylation sites.
Uniprot Accession Number	P04141
Amino Acid Sequence	APARSPSPST QPWEHVNAIQ EARRLLNLSR DTAAEMNETV EWISEMFDLQ EPTCLQTRLE LYKQGLRGSL TKLKGPLTMM ASHYKQHCPP TPETSCATQI ITFESFKENL KDFLLVIPFD CWEPVQE
Source	Chinese Hamster Ovary cells.
Physical Appearance and Stability	Sterile filtered colorless solution. Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.
Formulation and Purity	The GM CSF Human filtered solution (0.27mg/ml) contains 20mM TRIS HCl buffer pH 7.2. Greater than 95% as determined by SDS-PAGE.
Application	
Solubility	
Biological Activity	ED50 < 0.1 ng/ml, determined by the dose dependent stimulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line).
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**