

Recombinant Human Granulocyte Macrophage-Colony Stimulating Factor (rHuGM-CSF)

ORDERING INFORMATION

Catalog Number	Size
45104P-5	5ug
45104P-20	20ug
45104P-1000	1000ug

Formulation: Sterile filtered and lyophilized after dialysis against 2mM sodium phosphate, pH 7.4. Purified by proprietary chromatographic techniques.

BACKGROUND

GM-CSF was first identified as a growth factor that supports *in vitro* colony formation of granulocyte-macrophage progenitor cells. It is produced in response to immune or inflammatory stimuli by activated T cells, B cells, macrophages, mast cells, fibroblasts, and alveolar epithelial cells. GM-CSF is a 22kDa protein, 144 amino acids, composed of four bundle alpha helices.

DESCRIPTION

Recombinant human GM-CSF produced in *E. coli* is a single, non-glycosylated polypeptide containing 127 amino acids with a molecular weight of 14,477Da.

Accession no.: P04141.1

Purity: >98% as determined by RP-HPLC and SDS-PAGE.

AMINO ACID SEQUENCE

The first five N-terminal amino acids are Ala-Pro-Ala-Arg-Ser. N-terminal methionine is removed enzymatically.

BIOLOGICAL ACTIVITY

ED50 by dose-dependent stimulation of proliferation of human TF-1 cells (human erythroleukemic indicator cell line) is <0.1ng/ml which corresponds to a Specific Activity of 11,100,000 IU/mg.

STORAGE AND STABILITY

Reconstitute lyophilized GM-CSF in sterile distilled H₂O at not less than 100ug/ml. This can be further diluted in other aqueous solutions.

Store lyophilized product desiccated below -18°C. After reconstitution, GM-CSF may be stored at 4°C for 2-7 days and below -18°C for future use. For long term storage, addition of 0.1% human serum albumin or bovine serum albumin is recommended. Avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not for use in diagnostic or therapeutic procedures.