

9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

## 32-7003: Recombinant Human GM-CSF/CSF2 (E. coli)

Gene ID: CSF2
Gene ID: 1437
Uniprot ID: P04141

## **Description**

Source: E. coli. MW:14.6kD.

Recombinant Human Granulocyte-Macrophage Colony-Stimulating Factor is produced by our E.coli expression system and the target gene encoding Ala18-Glu144 is expressed. Granulocyte-Macrophage Colony Stimulating Factor (GM-CSF) was initially characterized as a growth factor that can support the in vitro colony formation of granulocyte-macrophage progenitors. It is produced by a number of different cell types (including activated T cells, B cells, macrophages, mast cells, endothelial cells and fibroblasts) in response to cytokine of immune and inflammatory stimuli. Besides granulocyte-macrophage progenitors, GM-CSF is also a growth factor for erythroid, megakaryocyte and eosinophil progenitors. On mature hematopoietic, monocytes/ macrophages and eosinophils. GM-CSF has a functional role on non-hematopoitic cells. It can induce human endothelial cells to migrate and proliferate. Additionally, GM-CSF can also stimulate the proliferation of a number of tumor cell lines, including osteogenic sarcoma, carcinoma and adenocarcinoma cell lines.

## **Product Info**

**Amount:**  $10 \mu g / 50 \mu g$ 

**Content:** Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, 5% Mannitol, pH 7.2.

Lyophilized protein should be stored at -20  $^{\circ}$ C, though stable at room temperature for 3 weeks.

**Storage condition:** Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted

samples are stable at -20°C for 3 months.

Amino Acid: MAPARSPSPSTQPWEHVNAIQEARRLLNLSRDTAAEMNETVEVISEMFDLQEPTCLQTRLELYKQGLRGSLTKL

KGPLTMMASHYKQHCPPTPETSCATQIITFESFKENLKDFLLVIPFDCWEPVQE

## **Application Note**

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100  $\tilde{A} \square \hat{A} \mu g/ml$ . Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin**: Less than 0.1 ng/ $\tilde{A} \square \hat{A} \mu g$  (1 IEU/ $\tilde{A} \square \hat{A} \mu g$ ) as determined by LAL test.

**Biological Activity:** ED50 is less than 0.1 ng/ml. Specific Activity of 1.0 x 10<sup>7</sup> IU/ mg. Measured by the dose-dependent stimulation of human TF-1 cell proliferation.