

bio-risk-free | not for human use | for research only | not for diagnostic or therapeutic use

Granulocyte macrophage colony-stimulating factor, recomb. human

CATALOG NUMBER: 01-AA080

DESCRIPTION

Granulocyte macrophage colony-stimulating factor (GM-CSF) is a hematopoietic growth factor produced by various cell types (such as T and B cells, macrophages, endothelial cells and fibroblasts) in response to cytokine or inflammatory stimuli. GM-CSF stimulates the development of granulocytes and macrophages, and the proliferation and development of erythroid, megakaryocyte and eosinophil progenitors. It also enhances functional activity of mature hematopoietic cells. GM-CSF is of great clinical value in reconstitution of the hematopoietic system following cancer therapy or bone marrow transplantation. Recombinant human GM-CSF is species-specific and not active on murine cells.

SOURCE

ISOkine™ recombinant human GM-CSF in the endosperm tissue of barley grain (*Hordeum vulgare*), that exhibits up to 50 times less protease activity than *E.coli* or mammalian cells. Barley seed is void of any human or animal viral contaminants that could jeopardize your cell culture.

FORMULATION

Sterile filtered through a 0.2 µm filter. Lyophilized from PBS, pH 7.2.

PURITY

Greater than 95% by SDS-PAGE gel analysis.

RECONSTITUTION

Note: Always centrifuge the vial before opening. It is recommended to reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 µg/ml. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

STABILITY

The lyophilized protein, though stable at room temperature for few weeks, is best stored at -20°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.

ENDOTOXIN LEVEL

Endotoxin level is less than 0.005ng per µg of ISOkine™ product (0.05EU/µg) as measured by turbidimetric kinetic assay.*

* Ref. Associates of Cape Cod Industries, Deacon Park, Knowsley, Liverpool, UK

MAT assay

Purified ISOkine™ product carries no pyrogenic or pro-inflammatory contaminants, as assayed with monocyte activation test using Human 10-plex Cytokine Assay measuring IL-6, TNF-alpha and IL-1beta induction.**

** Ref. The Blood Bank, University Hospital of Iceland, Reykjavik, Iceland

MOLECULAR WEIGHT

Recombinant human GM-CSF contains 127 amino acids and a 27 a.a. histidine-based tag for a total length of 154 a.a. and has a predicted molecular mass of 17.7 kDa.

DISCLAIMER