

CSF2

Recombinant Canine Granulocyte-Macrophage Colony Stimulating Factor

Catalog No.	CS497A	Quantity:	5 µg
	CS497B		20 µg
	CS497C		1 mg

Alternate Names: Colony stimulating factor 2 (granulocyte-macrophage)

Description: Recombinant Canine 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 or immune and inflammatory stimuli. Besides granulocyte-macrophage progenitors, GM-CSF is also a growth factor for erythroid, megakaryocyte and eosinophil progenitors. On mature hematopoietic cells, GM-CSF is a survival factor for and activates the effector functions of granulocytes, monocytes/macrophages and eosinophils.

Recombinant Canine GM-CSF is a single non-glycosylated polypeptide chain containing 127 amino acids.

Gene ID: 403923

Source: *E. coli*

Molecular Weight: 14.2 kDa

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

Purity: >95% by SDS-PAGE and HPLC analyses.

Endotoxin Level: <1 EU/µg as determined by LAL method.

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ determined by a cell proliferation assay using human TF-1 cells is less than 4 ng/ml.

Specific Activity: ≥ 2.5 x 10⁵ IU/mg.

Amino Acid Sequence: APTRSPTLVT RPSQHVDIAIQ EALSLNNSN DVTAVMNKAV KVVSEVFDPE
GPTCLETRLQ LYKEGLQGS LSLKNPLTMM ANHYKQHCPP TPESPCATQN
NFKSFKENL KDFLFNIPFD CWKPVKK

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. This depends upon the particular application employed. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: This lyophilized preparation is stable at 2-8°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

