

Recombinant Murine Macrophage Inflammatory Protein-1 alpha (rm MIP-1 alpha / CCL3)

Both **MIP-1 alpha** and MIP-1 beta are structurally and functionally related CC chemokines. They participate in the host response to invading bacterial, viral, parasite and fungal pathogens by regulating the trafficking and activation state of selected subgroups of inflammatory cells e.g. macrophages, lymphocytes and NK cells. While both MIP-1 alpha and MIP-1 beta exert similar effects on monocytes their effect on lymphocytes differ; with MIP-1 alpha selectively attracting CD8+ lymphocytes and MIP-1 beta selectively attracting CD4+ lymphocytes. Additionally, MIP-1 alpha and MIP-1 beta have also been shown to be potent chemoattractants for B cells, eosinophils and dendritic cells. Both human and murine MIP-1 alpha and MIP-1 beta are active on human and murine hematopoietic cells.

Recombinant murine MIP-1 alpha is a 7.8 kDa protein containing 69 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines.

Synonyms : Tonsillar lymphocyte LD78 alpha protein, Heparin-binding chemotaxis protein.

Source: *Escherichia coli*

AA Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Pro-Tyr-Gly

Formulation: Lyophilisate from a 0.22 µm filtered carrier free solution in 25 mM sodium phosphate pH 7.0 + 200 mM NaCl.

Reconstitution: Reconstitute in sterile endotoxin free water not less than 100 µg/ml

Stability: The lyophilized protein is stable for at least 2 years at -20°C. Reconstituted rm MIP-1a is stable for at least 3 months when stored in concentrated working aliquots (100 ng/µl or higher) at -20°C. Avoid repeated freeze/thaw cycles.

Biological Activity: Determined by its ability to chemoattract murine balb/c splenocytes using a concentration range of 1.0-10.0 ng/ml

Purity: 95% (verified by SDS-PAGE / silver stain)

Endotoxicity: The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method

Order N°: rm MIP-1a+Size
available sizes: 5 µg, 20 µg, 100 µg

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