

Analytical Data Sheet

Lot number

9021761

not for drug use

Product number

H-1712

Product

rec MIP-1 α (human)
Macrophage Inflammatory Protein-1 α

Description: Both MIP-1 α and MIP-1 β 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 α and MIP-1 β exert similar effects on monocytes their effect on lymphocytes differ; with MIP-1 α selectively attracting CD8+ lymphocytes and MIP-1 β selectively attracting CD4+ lymphocytes. Additionally, MIP-1 α and MIP-1 β have also been shown to be potent chemoattractants for B cells, eosinophils and dendritic cells. Both human and murine MIP-1 α and MIP-1 β are active on human and murine hematopoietic cells. Recombinant human MIP-1 α is a 7.8 kDa protein containing 69 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines.

Source: *E.coli*

Purity: \geq 98% by SDS-PAGE gel and HPLC analyses

Endotoxin level: Endotoxin level is <0.1 ng / ug of protein (<1 EU/ug)

Protein Content: Verified by UV Spectroscopy and/or SDS-PAGE gel.

Formulation: Sterile filtered through a 0.2 micron filter. Lyophilized with no additives.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8 $^{\circ}$ C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20 $^{\circ}$ C to -80 $^{\circ}$ C.

Storage/Stability: The lyophilized protein can be stored at -20 $^{\circ}$ C to -80 $^{\circ}$ C for 1 year. Diluted as per CoA -20 $^{\circ}$ C to -80 $^{\circ}$ C for 6 months. Room temperature 1 month.

Biological Activity: Determined by its ability to chemoattract human monocytes using a concentration range of 1.0-10.0 ng/ml.

AA Sequence: ASLAADTPA CCFSYTSRQI PQNFIADYFE TSSQCSKPGV IFLTKRSRQV
CADPSEEWVQ KYVSDLELSA

Usage: For Research Use Only. Not for use in diagnostic or therapeutic procedures.

Latest update: January 17, 2012

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