MIP-1alpha Rat E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Rat
Other names: Macrophage Inflammatory Protein-1?, CCL3, LD78?

Cat. No:	
RBG30066005	(5 µg)
RBG30066020	(20 µg)
RBG30066100	(100 µg)

Description

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

Research topic

Chemokines, Cytokines and chemokines and related molecules, Immune Response, Infection and Inflammation, Neural tissue markers, Transplantation

Amino Acid Sequence

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APYGADTPTA CCFSYGRQIP RKFIADYFET SSLCSQPGVI FLTKRNRQIC ADPKETWVQE YITELELNA
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Source

E. coli

Purity

98%

Biological Activity

Assay#1: Determined by its ability to chemoattract rat peritoneal macrophages using a concentration of 50.0-100.0 ng/ml.
Assay#2: Determined by its ability to chemoattract human blood monocytes using a concentration range of 10.0-100.0 ng/ml.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. 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°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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