

## MIP-1 $\alpha$ /CCL3, human recombinant

<b>CATALOG #:</b>	7173-10	10 $\mu$ g
	7173-50	50 $\mu$ g
<b>ALTERNATE NAMES:</b>	Macrophage Inflammatory Protein-1 $\alpha$ , CCL3, LD78 $\alpha$	
<b>SOURCE:</b>	E. Coli	
<b>PURITY:</b>	$\geq$ 98% by SDS-PAGE gel and HPLC analyses	
<b>MOL. WEIGHT:</b>	7.8 kDa	
<b>ENDOTOXIN LEVEL:</b>	< 0.1 ng/ $\mu$ g of protein (<1EU/ $\mu$ g).	
<b>FORM:</b>	Lyophilized	
<b>FORMULATION:</b>	Sterile filtered through a 0.2 micron filter. Lyophilized with no additives.	
<b>STORAGE CONDITIONS:</b>	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

### 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°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°C to -80°C.

### DESCRIPTION:

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 chemo attractants 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 human MIP-1 $\alpha$  is a 7.8 kDa protein containing 70 amino acid residues, including the four highly conserved

### BIOLOGICAL ACTIVITY:

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

### AMINO ACID SEQUENCE:

ASLAADTPTA CCFSYTSRQI PQNFIADYFE TSSQCSKPGV IFLTKRSRQV  
CADPSEEWVQ KYVSDLELSA

### RELATED PRODUCTS:

- MEC/CCL28, human recombinant (**Cat # 7170-10, -50**)
- MEC/CCL28, murine recombinant (**Cat # 7171-10, -50**)
- MIP-1 $\gamma$ /CCL9/10, murine recombinant (**Cat # 7174-10, -50**)
- MIP-3/CCL23, human recombinant (**Cat # 7175-10, -50**)
- MDC, human recombinant (**Cat # 4617-20, -100, -1000**)
- MCP-1 (MCAF), human recombinant (**Cat # 4222-20, -100, -1000**)
- MCP-1 (MCAF), rat recombinant (**Cat # 4224-10, -1000**)
- MCP-2, human recombinant (**Cat # 4225-10, -1000**)
- MCP-2, murine recombinant (**Cat # 4226-10, -1000**)
- MCP-3, human recombinant (**Cat # 4228-10, -1000**)
- MCP-3, murine recombinant (**Cat # 4229-10, -1000**)
- MCP-4, human recombinant (**Cat # 4231-10, -1000**)

**FOR RESEARCH USE ONLY! Not to be used in humans.**