Recombinant Human CCL3

Cat No:HR2R1241

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	CCL3
Gene ID	6348
Accession	P10147
Alternative Name	CCL3, LD78 alpha, MIP-1 alpha, C-C motif chemokine 3, G0/G1 switch regulatory protein 19-1, PAT 464.1, SIS-beta, Small-inducible cytokine A3, Tonsillar lymphocyte LD78 alpha protein, G0S19-1, MIP1A, SCYA3 Recombinant Human Macrophage Inflammatory Protein-1 Alpha (CCL3)
Species	Human
Source	E. coli
Description	Macrophage Inflammatory Protein-1 is a factor produced by macrophages that causes local inflammatory responses, and induces superoxide production by neutrophils. Two peptides are responsible for this activity. They have been termed MIP-1-alpha, and MIP-1-beta. The two MIP proteins are the major factors produced by macrophages following their stimulation with bacterial endotoxins. Both proteins are involved in the cell activation of human granulocytes (neutrophils, eosinophils, and basophils) and appear to be involved in acute neutrophilic inflammation. Both forms of MIP-1 stimulate the production of reactive oxygen species in neutrophils and the release of lysosomal enzymes. They also induce the synthesis of other pro-inflammatory cytokines such as IL-1, IL-6 and TNF in fibroblasts and macrophages. MIP-1-alpha is a potent agonist of basophils, inducing a rapid change of cytosolic free calcium (see also: Calcium ionophore), the release of histamine and sulfido- leukotrienes, and chemotaxis. Murine MIP-1- alpha is the primary stimulator of TNF secretion by macrophages, whereas MIP-1-beta antagonizes the inductive effects of MIP-1- alpha. In human monocytes the production of MIP-1-beta can be induced by bacterial lipopolysaccharides and IL-7. The biological activities of MIP-1-alpha and MIP-1-beta are mediated by receptors that bind both factors CCR5. A second species of receptors for these two factors also appears to bind MCAF.
Functions	Determined by its ability to chemoattract human monocytes using a concentration range of 1.0-10.0 ng/mL.
Formulation	Recombinant MIP-1 was lyophilized from a 0.2 ?m filtered PBS solution pH 7.5.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	8
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.

Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

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