SignalChem
Specialists in Signaling Proteins
1-866-9 KINASE (54-6273)

Catalog #	Aliquot Size
M841-40BN-10	10 µg
M841-40BN-100	100 µg
M841-40BN-1000	1 mg

Recombinant Human CCL4

Recombinant human protein expressed in E. coli cells

Catalog # M841-40BN
Lot # G3211-15

Product Description

Recombinant Human CCL4 was expressed in E. coli cells. The protein accession number is P13236

Gene Aliases

C-C motif chemokine 4, G-26, T-lymphocyte-secreted protein HC21, Lymphocyte activation gene 1 protein, LAG-1, MIP-1-beta(1-69), MIP-1-beta, PAT 744, Protein H400, SIS-gamma, Small-inducible cytokine A4, T-cell activation protein 2, ACT-2, MIP1B, SCYA4, Rec

Endotoxin Level

<1.0 EU/µg of recombinant protein as determined by the LAL method.

Formulation

Recombinant MIP-1 beta was lyophilized from a 0.2 µm filtered PBS solution.

Reconstitution Protocol

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.

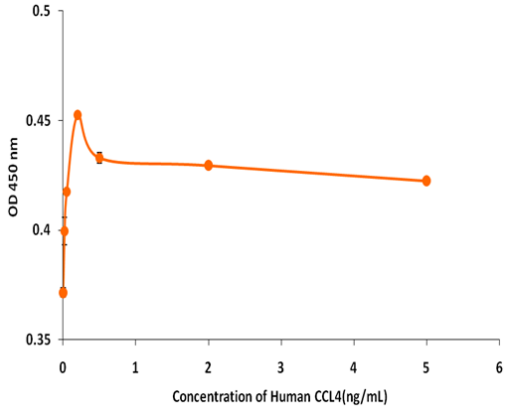
Storage and Stability

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

Scientific Background

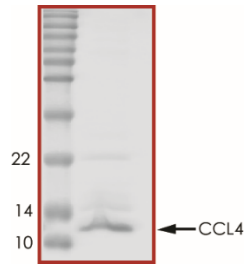
Macrophage Inflammatory Protein-1 is a factor produced by macrophages that causes local inflammatory responses, and induces superoxide production by neutrophils. Two peptides are responsible for this activity. They have been termed MIP-1-alpha, and MIP-1-beta. The two MIP proteins are the major factors 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.

Specific Activity



Determined by its ability to chemoattract human blood monocytes using a concentration range of 2-10 ng/mL.

Purity



Recombinant Human CCL4 resolved on a 17% SDS-PAGE gel under reducing conditions and stained with Coomassie Brilliant Blue G-250

Approx. MW **8.0 kDa**

Recombinant Human CCL4

Recombinant human protein expressed in E. coli cells

Catalog Number	M841-40BN
Specific Lot Number	G3211-15
Purity	95%
Stability	6 mos. at –20°C from date of shipment
Storage & Shipping	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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