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MIP 1a Rat

Macrophage Inflammatory Protein-1 Alpha Rat Recombinant (CCL3)
CHK0125

Product Overview

Name	MIP 1a Rat
Description	
Macrophage Inflammatory Protein-1 Alpha Rat Recombinant (CCL3)	
Accession (Primary)	P50229
Synonyms	
Small inducible cytokine A3, CCL3, Macrophage inflammatory protein 1-alpha, MIP-1-alpha, Tonsillar lymphocyte LD78 alpha protein, G0/G1 switch regulatory protein 19-1, G0S19-1 protein, SIS-beta, PAT 464.1, chemokine (C-C motif) ligand 3, MIP1A, SCYA3, G0S19-1, LD78ALPHA.	
Introduction	
Macrophage Inflammatory Proteins (MIP) belong to the family of chemotactic cytokines known as chemokines. In humans, there are two major forms, MIP-1a and MIP-1b that are now officially named CCL3 and CCL4 respectively. Both are major factors produced by macrophages after they are stimulated with bacterial endotoxins. They activate human granulocytes (neutrophils, eosinophils and basophils) which can lead to acute neutrophilic inflammation. They also induce the synthesis and release of other pro-inflammatory cytokines such as interleukin 1 (IL-1), IL-6 and TNF-a from fibroblasts and macrophages. The genes for CCL3 and CCL4 are both located on human chromosome 17.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
The protein was lyophilized from 1 mg/ml solution containing no additives.	
Stability	
Lyophilized MIP-1a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	
Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.	
Amino acid sequence	

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The sequence of the first five N-terminal amino acids was determined and was found to be, Ala-Pro-Tyr-Gly-Ala.

Biological Activity

The Activity is calculated by the ability to chemoattract of rat peritoneal macrophages using a conc. of 60 ng/ml corresponding to a Specific Activity of 16,667IU/mg.

Solubility

It is recommended to reconstitute the lyophilized Macrophage Inflammatory Protein-1a in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

MIP 1a Rat is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P50229)