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MIP-1α/CCL3

Catalog # PVGS1370

Specification

MIP-1α/CCL3 - Product Information

Primary Accession P10147

Species
Human

Sequence
Ala27-Ala92

Purity
> 95% as analyzed by SDS-PAGE
> 95% as analyzed by HPLC

Endotoxin Level
< 0.2 EU/ μg of protein by gel clotting method

Biological Activity
ED₅₀ < 100.0 ng/ml, measured in a calcium flux assay using CHO/Gα15 cells expressing CCR5.

Expression System
CHO

Formulation **Lyophilized after extensive dialysis against PBS.**

Reconstitution
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 μg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

MIP-1α/CCL3 - Additional Information

Gene ID 6348

Other Names
C-C motif chemokine 3, G0/G1 switch regulatory protein 19-1, Macrophage inflammatory protein 1-alpha, MIP-1-alpha, PAT 464.1, SIS-beta, Small-inducible cytokine A3, Tonsillar lymphocyte LD78 alpha protein, MIP-1-alpha(4-69), LD78-alpha(4-69), CCL3, G0S19-1, MIP1A, SCYA3

Target Background
MIP-1 Alpha, also known as CCL3, G0S19-1 and SCYA3, LD78 alpha, is an inflammatory chemokine. MIP-1α belongs to the CCL chemokine family, and shares 68% homology with MIP-1β. The mature

form of MIP-1α contains 69 amino acids, exists as dimers in solution, and tends to undergo reversible aggregation. It binds to CCR1, CCR4 and CCR5, and participates in the host response to invading pathogens by regulating the trafficking and activation of inflammatory cells, such as macrophages, lymphocytes, NK cells and dendritic cells. MIP-1 alpha polymorphisms are associated with HIV susceptibility or resistance. Recombinant MIP-1 alpha induces a dose-dependent inhibition of HIV and SIV infection. Upon stimulation by endogenous and exogenous agents such as Interleukin-1β, Interferon-γ, and lipoteichoic acid from gram-positive bacteria, monocytes are able to secrete significant amounts of MIP-1α. MIP-1α augments the adhesions of T lymphocytes, monocytes, and neutrophils to vascular cell adhesion molecule 1. Additionally, in wounds, MIP-1α chemoattracts macrophages in order to accelerate the tissue repair process.

MIP-1α/CCL3 - Protein Information

Name CCL3

Synonyms G0S19-1, MIP1A, SCYA3

Function
Monokine with inflammatory and chemokinetic properties. Binds to CCR1, CCR4 and CCR5. One of the major HIV-suppressive factors produced by CD8+ T-cells. Recombinant MIP-1-alpha induces a dose- dependent inhibition of different strains of HIV-1, HIV-2, and simian immunodeficiency virus (SIV).

Cellular Location
Secreted.

MIP-1α/CCL3 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MIP-1α/CCL3 - Images