

MIP-1α/CCL3

Catalog # PVGS1487

Specification

MIP-1α/CCL3 - Product Information

Primary Accession Species Mouse <u>Q5QNW0</u>

Sequence Ala24-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

The EC₅₀ value of mouse MIP-1 α /CCL3 on Ca²⁺ mobilization assay in CHO-K1/G α 15/mCCR1 cells (human G α 15 and mouse CCR1 stably expressed in CHO-K1 cells) is less than 100.0 ng/ml.

Expression System HEK 293

Formulation

Reconstitution

Lyophilized after extensive dialysis against PBS.

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

Target Background

MIP-1 Alpha, also known as CCL3, GOS19-1 and SCYA3, LD78 alpha, is an inflammatory chemokine. MIP-1 α belongs to the CCL chemokine family, and shares 68% homology with MIP-1 β . The mature form of MIP-1 α 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-1 β , Interferon- γ , and lipoteichoic acid from gram-positive bacteria, monocytes are able to secrete significant amounts of MIP-1 α . MIP-1 α augments the adhesions of T lymphocytes, monocytes, and neutrophils to vascular cell adhesion molecule 1. Additionally, in wounds, MIP-1 α chemoattracts macrophages in order to accelerate the tissue repair process.

MIP-1 α /CCL3 - Protein Information

MIP-1α/CCL3 - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MIP-1α/CCL3 - Images