

# MIP-1 $\alpha$ /CCL3

Catalog # PVGS1370

## Product Information

---

|                                  |  |
|----------------------------------|--|
| <b>Primary Accession Species</b> | <a href="#">P10147</a><br>Human  |
| <b>Sequence</b>                  | Ala27-Ala92  |
| <b>Purity</b>                    | > 95% as analyzed by SDS-PAGE<br>> 95% as analyzed by HPLC   |
| <b>Endotoxin Level</b>           |  |
| <b>Biological Activity</b>       | ED <sub>50</sub>   |
| <b>Expression System</b>         | CHO  |
| <b>Formulation</b>               | Lyophilized after extensive dialysis against PBS.  |
| <b>Reconstitution</b>            | 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 <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.   |
| <b>Storage &amp; Stability</b>   | 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. |

## Additional Information

---

|                          |  |
|--------------------------|--|
| <b>Gene ID</b>           | 6348   |
| <b>Other Names</b>       | 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   |
| <b>Target Background</b> | MIP-1 Alpha, also known as CCL3, G0S19-1 and SCYA3, LD78 alpha, is an inflammatory chemokine. MIP-1 $\alpha$ belongs to the CCL chemokine family, and shares 68% homology with MIP-1 $\beta$ . The mature form of MIP-1 $\alpha$ 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 $\beta$ , Interferon- $\gamma$ , and lipoteichoic acid from gram-positive bacteria, monocytes are able to secrete significant amounts of |

MIP-1 $\alpha$ . MIP-1 $\alpha$  augments the adhesions of T lymphocytes, monocytes, and neutrophils to vascular cell adhesion molecule 1. Additionally, in wounds, MIP-1 $\alpha$  chemoattracts macrophages in order to accelerate the tissue repair process.

## Protein Information

---

|                          |  |
|--------------------------|--|
| <b>Name</b>              | CCL3   |
| <b>Synonyms</b>          | GOS19-1, MIP1A, SCYA3  |
| <b>Function</b>          | 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). |
| <b>Cellular Location</b> | Secreted.  |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.