

LD78-β/CCL3L1

Catalog # PVGS1387

Specification

LD78-β/CCL3L1 - Product Information

Primary Accession **Species** Human <u>P16619</u>

Sequence Ala24-Ala93

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 < 0.4 µg/ml, measured by the FLIPR assay using CHO cells transfected with human CCR5, the receptor of human CCL3L1, corresponding to a specific activity of > 2.5 × 10³ units/mg.

Expression System E. coli

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 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.

LD78-β/CCL3L1 - Additional Information

Gene ID 414062;6349

Other Names

C-C motif chemokine 3-like 1, G0/G1 switch regulatory protein 19-2, LD78-beta(1-70), PAT 464.2, Small-inducible cytokine A3-like 1, Tonsillar lymphocyte LD78 beta protein, LD78-beta(3-70), LD78-beta(5-70), CCL3L1, D17S1718, G0S19-2, SCYA3L1

Target Background

LD78-beta/CCL3L1 is a proinflammatory chemokine and the isoform of Macrophage Inflammatory



Protein-1 alpha (MIP-1 alpha). LD78-beta is secreted by most mature leukocytes, predominantly macrophages, and its major receptor is the G-protein coupled receptor CCR5, which is also the co-receptor used by the HIV-1 virus for cell entry. LD78-beta has superior antiviral activity and induces a variety of immune cells, particularly CD8⁺> T cells and immature dendritic cells. LD78-beta attracts lymphocytes and macrophages to sites of inflammation and infection, and its functions are inhibited by Interleukin-4, Interleukin-10, and Interleukin-13. Importantly, the copy number variation of LD78-beta is associated with HIV susceptibility, indicating LD78-beta's critical role in the disease.

LD78-β/CCL3L1 - Protein Information

Name CCL3L1

Synonyms D17S1718, G0S19-2, SCYA3L1

Function

Chemotactic for lymphocytes and monocytes. Is a ligand for CCR1, CCR3 and CCR5. Is an inhibitor of HIV-1-infection. The processed form LD78-beta(3-70) shows a 20-fold to 30-fold higher chemotactic activity and is a very potent inhibitor of HIV-1-infection. LD78- beta(3-70) is also a ligand for CCR1, CCR3 and CCR5.

Cellular Location Secreted.

LD78-β/CCL3L1 - 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
- <u>Cell Culture</u>

LD78-β/CCL3L1 - Images