

**LD78-β/CCL3L1**  
**Catalog # PVGS1387****Specification**

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**LD78-β/CCL3L1 - Product Information**

Primary Accession [P16619](#)  
**Species**  
Human

**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**  
ED<sub>50</sub> < 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 × 10<sup>3</sup> units/mg.

**Expression System**  
E. coli

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<sub>2</sub>O 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<sup>+</sup> 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 Cytometry](#)
- [Cell Culture](#)

### **LD78-β/CCL3L1 - Images**