

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant MIP-1 α /CCL3, Mouse

Catalog Number: BK0322-5 μ g

Source: HEK 293

Quantity: 5 μ g

Description:

MIP-1 α /CCL3, also known as LD78 α , 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. The receptors of MIP-1 α in vivo are mainly the G-protein coupled receptors CCR1 and CCR5. 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. Recombinant Mouse MIP-1 α /CCL3 (rmMIP-1 α) produced in HEK 293 cells is a single polypeptide chain containing 69 amino acids. A fully biologically active molecule, rmMIP-1 α has a molecular mass of 7.8 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Molecular Weight:

7.8 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

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 ng/ml.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

APYGADTPTACCFSSYSRKIPRQFIVDYF-
ETSSLCSQPGVIFLTKRNRQICADSKETWVQEY-
ITDLELNA

Endotoxin:

< 0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Storage:

Lyophilized recombinant Mouse MIP-1 α /CCL3 remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution Mouse MIP-1 α /CCL3 should be stable up to 1 week at 4 $^{\circ}$ C or up to 2 months at -20 $^{\circ}$ C.

Usage:

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