

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant MIP-1 α /CCL3, Human

Catalog Number: BK0136-1mg

Source: Escherichia coli.

Quantity: 1mg

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. In addition, in wounds, MIP-1 α chemo-attracts macrophages in order to accelerate the tissue repair process. Recombinant human MIP-1 α /CCL3 (rhMIP-1 α) produced in E.coli is a single non-glycosylated polypeptide chain containing 70 amino acids. A fully biologically active molecule, rhMIP-1 α has a molecular mass of 7.8 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary 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:

ED50 < 80 ng/mL, measured by the FLIPR assay using CHO cells transfected with human CCR5, the receptor

of human CCL3, corresponding to a specific activity of > 1.25 $\times 10^4$ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

ASLAADTPTACCFSYTSRQIPQNFADYFETSS-
QCSKPGVIFLTKRS-
RQVCADPSEEWVQKYVSDLELSA

Endotoxin:

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

Reconstitution:

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

Storage:

Lyophilized recombinant human MIP-1 α /CCL3 (rhMIP-1 α) remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution, rhMIP-1 α remains stable up to 2 weeks at 4 $^{\circ}$ C or up to 3 months at -20 $^{\circ}$ C.

Usage:

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