

GRO-beta/MIP-2 (CXCL2), viral recombinant (rvGRO b)

Catalog No: 97352 Lot No: XXXXX Source: *E. coli*

Synonyms: MIP-2 Viral, Viral MIP-2, MIP2 Viral, Viral MIP2, Viral Macrophage inflammatory Protein-2

Background

Viral MIP-2 is closely related to MIP-1a, show amino acid sequence similarity of about 41%. At the amino acid sequence level, Viral MIP-1 and Viral MIP-2 share 48% similarity. Viral MIP-1 and Viral MIP-2 are more closely linked to one another phylogenetically than to other human chemokines, signifying that they have gene duplication within the virus rather than by two independent gene aquisitions. Viral MIP-2 binds to the CCR3 chemokine receptor through which eotaxin and other ß chemokines activate eosinophils. Viral MIP-2 activates and chemoattract human eosinphils.

Description

GRO-beta viral recombinant produced in *E. coli* is a single,non-glycosylated, polypeptide chain containing 70 amino acids and having a molecular mass of 7.9 kDa. MIP-2 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from 1 mg/ml solution containing 20 mM Phospahte Buffer, pH 7.4 % 0.15 M NaCl.

Solubility

It is recommended to reconstitute the lyophilized CXCL2 in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized MIP-2 viral protein, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL2 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

LGASWHRPDK CCLGYQKRPL PQVLLSSWYP TSQLCSKPGV IFLTKRGRQV CADKSKDWVK KLMQQLPVTA

Activity

Determined by the inhibitory effect on monocyte migration response to human MIP1A using a concentration range of 1 - 10 μ g/ml of viral MIP2 which will inhibit 25 ng/ml of human MIP1A.

Usage

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