



User Manual

Macrophage Inflammatory Protein-2/CXCL2 (MIP-2/CXCL2) (Murine)

Cat. No. MECXP-02012

Description:

Macrophage Inflammatory Protein-2 (MIP-2) was originally identified as a heparin binding protein secreted from a murine macrophage cell line in response to endotoxin stimulation. Based on its protein and DNA sequences, MIP-2 is a member of the alpha (CXC) subfamily of chemokines. Similarly to other alpha chemokines, murine MIP-2 is a potent neutrophil attractant and activator. MIP-2 and KC can bind the murine interleukin 8 type B receptor homologue with high affinity. The expression of MIP-2 was found to be associated with neutrophil influx in pulmonary inflammation and glomerulonephritis, suggesting that MIP-2 may contribute to the pathogenesis of inflammatory diseases.

Source:

Escherichia coli

Unit:

20 µg

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

Formulation:

Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl.

Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Molecular Weight:

Approximately 7.8 kDa, a single, non-glycosylated polypeptide chain containing 73 amino acids.

Endotoxin:

Less than 1 EU/μg of MIP-2/CXCL2 as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The biologically active determined by a chemotaxis bioassay using human neutrophils is in a concentration range of 1.0-10 ng/mL.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

AVVASELRCQ CLKTLPRVDF KNIQSLSVTP PGPHCAQTEV
IATLKGGQKVCLDPEAPLVQ KIIQKILNKG KAN

Purity:

> 97% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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