



User Manual

**Macrophage Inflammatory Protein-1 gamma/CCL9/10 (CCL9/10)
(Murine)**

Cat. No. MECCP-10012

Description:

Macrophage Inflammatory Protein-1 gamma (MIP-1 gamma), also called MIP-2, belongs to the β (or CC) intercrine family of chemokines. It is further classified as a member of the NC6 or six cysteine-containing CC subfamily of chemokines. This subfamily contains four N-terminally extended chemokines, two human (CCL15 and CCL23) and two mouse (CCL9 and CCL10). Chemokines are known to undergo proteolytic processing to generate multiple isoforms. NC6 chemokines are usually only marginally active at full length, but are converted to highly active forms upon Nterminal truncation. Mature CCL9, in the presence of inflammatory fluids, is naturally truncated by 28, 29 or 30 aa at the N terminus, generating a highly active, 8 kDa, 71-73 aa CCR1 ligand. In contrast, other CCR1 ligands, CCL3/MIP1 α and CCL5/RANTES, lose their potency when proteolytically processed. CCL9/10 is constitutively secreted, and circulates as a full length molecule. Any onset of inflammation with subsequent enzyme release may act on local NC6 chemokines, generating early, potent leukocyte chemoattractants.

Source:

Escherichia coli

Unit:

20 μ g

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 $< -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Formulation:

Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.

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 11.5 kDa, a single non-glycosylated polypeptide chain containing 101 amino acids.

Endotoxin:

Less than 1 EU/ μg of CCL9/10 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 0.1-10 ng/mL.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

QITHATETKE VQSSLKAQQG LEIEMFHMGF QDSSDCCLSY NSRIQCSRFI
GYFPTSGGCT RPGIIFISKR GFQVCANPSD RRVQRCIERL EQNSQPRTYK Q

Purity:

> 95% 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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