

Rev04 Update: Mar,01,2022

DATASHEET

MIP-1 γ /CCL9/10, Mouse

Cat. No.: Z02901

Product Introduction

Species	Mouse
Protein Construction	MIP-1γ (Gln22-Gln122) Accession # P51670
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 1 EU/µg of protein by LAL method
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human neutrophils is in a concentration range of 0.1-10.0 ng/ml.
Expression System	E. coli
Theoretical Molecular Weight	11.6 kDa
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background



Target Background : 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/MIP1α 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.

Synonyms : Chemokine (C-C motif) ligand 9; CCL-9

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.