

## MIP-1y/CCL9/Scya10

Catalog # PVGS1169

## **Product Information**

Primary Accession P51670
Species Mouse

Sequence Gln22-Gln122

**Purity** > 95% as analyzed by SDS-PAGE

> 95% as analyzed by HPLC

**Endotoxin Level** 

**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 Im 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.

## **Additional Information**

**Gene ID** 20308

Other Names C-C motif chemokine 9, CCF18, Macrophage inflammatory protein 1-gamma,

MIP-1-gamma, Macrophage inflammatory protein-related protein 2, MRP-2, Small-inducible cytokine A9, CCL9(29-101), CCL9(30-101), CCL9(31-101), Ccl9,

Mrp2, Scya10, Scya9

Target Background Macrophage Inflammatory Protein-1 gamma (MIP-1 gamma), also called

MIP-2, belongs to the  $\beta$  (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 $\alpha$  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.

## **Protein Information**

Name Ccl9

**Synonyms** Mrp2, Scya10, Scya9

**Function** Monokine with inflammatory, pyrogenic and chemokinetic properties.

Circulates at high concentrations in the blood of healthy animals. Binding to a high-affinity receptor activates calcium release in neutrophils. It also inhibits

colony formation of bone marrow myeloid immature progenitors.

**Cellular Location** Secreted.

**Tissue Location** Expressed mainly in the liver, lung, and the thymus, although some

expression has been detected in a wide variety of tissues except brain

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