

MIP-1γ/CCL9/Scya10

Catalog # PVGS1169

## Specification

# MIP-1γ/CCL9/Scya10 - Product Information

Primary Accession Species Mouse <u>P51670</u>

Sequence Gln22-Gln122

Purity > 95% as analyzed by SDS-PAGE<br>> 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  $\mu$ 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.

# MIP-1y/CCL9/Scya10 - 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.

# MIP-1y/CCL9/Scya10 - 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

# MIP-1γ/CCL9/Scya10 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MIP-1y/CCL9/Scya10 - Images