

**Recombinant Rat MIP-1 $\beta$  (CCL4)**  
**Catalog # PBG10309****Specification**

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**Recombinant Rat MIP-1 $\beta$  (CCL4) - Product Information****Recombinant Rat MIP-1 $\beta$  (CCL4) - Additional Information****Description**

Both MIP-1 $\alpha$  and MIP-1 $\beta$  are structurally and functionally related CC chemokines. They participate in the host response to invading bacterial, viral, parasite and fungal pathogens by regulating the trafficking and activation state of selected subgroups of inflammatory cells e.g. macrophages, lymphocytes and NK cells. While both MIP-1 $\alpha$  and MIP-1 $\beta$  exert similar effects on monocytes their effect on lymphocytes differ; with MIP-1 $\alpha$  selectively attracting CD8<sup>+</sup> lymphocytes and MIP-1 $\beta$  selectively attracting CD4<sup>+</sup> lymphocytes. Additionally, MIP-1 $\alpha$  and MIP-1 $\beta$  have also been shown to be potent chemoattractants for B cells, eosinophils and dendritic cells. Both human and murine MIP-1 $\alpha$  and MIP-1 $\beta$  are active on human and murine hematopoietic cells. Recombinant rat MIP-1 $\beta$  is a 7.8 kDa protein containing 69 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines.

**Biological Activity**

Determined by its ability to chemoattract human monocytes using a concentration range of 0.01-1.0  $\mu$ g/ml.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is <0.1 ng/  $\mu$ g of protein (<1EU/  $\mu$ g).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Recombinant Rat MIP-1 $\beta$  (CCL4) is for research use only and not for use in diagnostic or therapeutic procedures.

**Recombinant Rat MIP-1 $\beta$  (CCL4) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Recombinant Rat MIP-1 $\beta$ (CCL4) - Images**