



## Recombinant Rat MIP-1 beta

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>R20-035</b>
Size:	20 µg
Lot. No.:	According to product label

### Sequence

APIGSDPPTS CCFSYTSRKI HRNFVMDYEE TSSLCSQPAV  
VFLTKKGRQI CADPSEPWVN EYVNDLELN

### Database References

<b>Protein RefSeq:</b>	NP_446310
<b>Uniprot ID:</b>	P50230
<b>mRNA RefSeq:</b>	NM_053858

## Scientific Background

<b>Gene-ID (NCBI):</b>	116637
<b>Synonyms:</b>	Ccl4; Scya4; Mip1-b

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+ lymphocytes and MIP-1 $\beta$  selectively attracting CD4+ 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.

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 98% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	69
<b>MW:</b>	7.8 kDa

**Biological Activity:** Determined by its ability to chemoattract human monocytes using a concentration range of 0.01-1.0 µg/ml.



**AVOID REPEATED FREEZE AND THAW CYCLES!**