



# Anti-Rat MIP-1 alpha

20150223ML



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

<b>Cat.-no.:</b>	<b>104-P09</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** Produced from sera of rabbits pre-immunized with highly pure recombinant Rat MIP1 $\alpha$ . Anti-Rat MIP1 $\alpha$  specific antibody was purified by affinity chromatography employing immobilized Rat MIP1 $\alpha$  matrix.

## Target Background

<b>Synonyms (Target):</b>	Ccl3; Scya3; MIP-1a
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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 rat MIP-1 $\alpha$  and MIP-1 $\beta$  are active on human and murine hematopoietic cells. Recombinant rat MIP-1 $\alpha$  is a 7.8 kDa protein containing 69 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines.

### Database References Target

<b>Protein RefSeq:</b>	NP_037157
<b>Uniprot ID:</b>	P50229
<b>mRNA RefSeq:</b>	NM_013025

## Product Specifications

<b>Species reactivity</b>	Rat
<b>Clone/Ab feature</b>	Rabbit IgG
<b>Cross reactivity</b>	Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal Antibody
<b>Purification</b>	Antigen-affinity purified
<b>Immunogen</b>	Recombinant Rat MIP-1 alpha
<b>Formulation</b>	lyophilized from PBS
<b>Reconstitution buffer</b>	water

**Reconstitution:** Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

**Stability:** The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

### Applications

**Neutralization:** To yield one-half maximal inhibition [ND<sub>50</sub>] of the biological activity of Rat MIP-1a (100 ng/ml), a concentration of 8 - 10 µg/ml of this antibody is required.

**ELISA:** To detect Rat MIP-1a by direct ELISA (using 100 µl/well antibody solution) a concentration of at least 0.5 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of 0.2 - 0.4 ng/well of recombinant Rat MIP-1a.

**Western Blot:** To detect Rat MIP-1a by Western Blot analysis this antibody can be used at a concentration of 0.1 - 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant Rat MIP-1a is 1.5 - 3.0 ng/lane, under either reducing or non-reducing conditions.

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**