

For Research Use Only

# CCL4/MIP-1 beta Recombinant monoclonal antibody

Catalog Number:87439-1-RR



## Basic Information

<b>Catalog Number:</b> 87439-1-RR	<b>GenBank Accession Number:</b> NM_053858.1	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 116637	<b>CloneNo.:</b> 251973B10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P50230	<b>Recommended Dilutions:</b> WB: 1:2000-1:10000 IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IF/ICC: 1:400-1:1600
<b>Isotype:</b> IgG	<b>Full Name:</b> chemokine (C-C motif) ligand 4	
<b>Immunogen Catalog Number:</b> EG3200	<b>Calculated MW:</b> 10 kDa	
	<b>Observed MW:</b> 10 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> mouse, rat	<b>WB :</b> PMA, LPS and Brefeldin A treated RAW 264.7 cells, <b>IP :</b> PMA, LPS and Brefeldin A treated NR8383 cells, <b>IF/ICC :</b> PMA, LPS and Brefeldin A treated NR8383 cells,

## Background Information

CCL4 (C-C motif chemokine ligand 4), also known as macrophage inflammatory protein-1 $\beta$  (MIP-1 $\beta$ ), is a pivotal chemokine that governs immune cell migration and activation. By binding primarily to its receptor CCR5, it directs the recruitment of monocytes, dendritic cells, natural killer (NK) cells, and T lymphocytes to sites of inflammation and infection. CCL4 plays a crucial role in antiviral defense, antitumor immunity, and inflammatory responses. However, dysregulated CCL4 signaling is implicated in the pathogenesis of chronic inflammatory diseases, autoimmune disorders, and cancer progression. Notably, due to its shared use of the CCR5 receptor with HIV-1, CCL4 also participates in HIV pathogenesis. This dual role as a mediator of both protective immunity and pathology positions CCL4 as a significant biomarker and a promising therapeutic target in immunology and medicine.

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

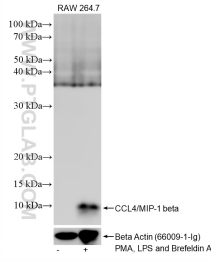
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

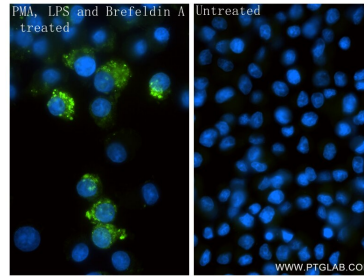
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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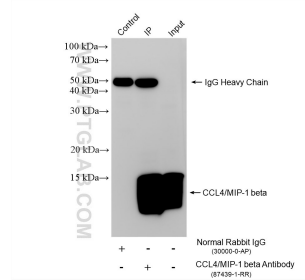
## Selected Validation Data



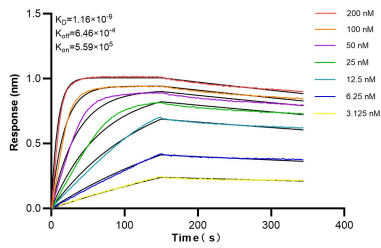
PMA, LPS and Brefeldin A treated RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 87439-1-RR (CCL4/MIP-1 beta antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed PMA, LPS and Brefeldin A treated NR8383 cells using CCL4/MIP-1 beta antibody (87439-1-RR, Clone: 251973B10) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



IP result of anti-CCL4/MIP-1 beta (IP:87439-1-RR, 4ug; Detection:87439-1-RR 1:1000) with PMA, LPS and Brefeldin A treated NR8383 cells lysate 800 ug.



Biolayer interferometry (BLI) kinetic assays of 87439-1-RR against Rat CCL4/MIP-1 beta were performed. The affinity constant is 1.16 nM.