

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CCL18/PARC in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 20% cross-reactivity with recombinant human (rh) MIP-1 $\alpha$ and recombinant mouse (rm) MIP-1 $\alpha$ is observed and 10% cross-reactivity with rmMIP-1 $\beta$ , rhMIP-1 $\beta$ , rhMIP-1, recombinant viral (rv) MIP-I, rvMIP-II, rhHCC-1, and rhMIP-1 $\delta$ is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CCL18/PARC Ala21-Ala89 Accession # P55774
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m filtered solution in PBS.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 $\mu$ g/mL	Recombinant Human CCL18/PARC (Catalog # 394-PA)
<b>Intracellular Staining by Flow Cytometry</b>	2.5 $\mu$ g/10 <sup>6</sup> cells	Human monocyte-derived dendritic cells treated with Recombinant Human IL-4 (Catalog # 204-IL), Recombinant Human GM-CSF (Catalog # 215-GM), Recombinant Human TNF- $\alpha$ (Catalog # 210-TA), Recombinant Human IL-1 $\beta$ /IL-1F2 (Catalog # 201-LB), and LPS, fixed with paraformaldehyde and permeabilized with saponin

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

CCL18, also known as alternative macrophage activation-associated CC chemokine (AMAC)-1, macrophage inflammatory protein (MIP)-4, and dendritic cell chemokine (DC-CK1), is a novel CC chemokine that is highly homologous to MIP-1 $\alpha$  (61% amino acid (aa) sequence identity). CCL18 cDNA encodes an 89 aa residue precursor protein with a 20 aa putative signal peptide that is cleaved to generate a 69 aa residue mature protein which lacks potential glycosylation sites. *In vitro*, CCL18 mRNA expression is induced in alternatively activated macrophages by Th2 cytokines such as IL-4, IL-10, and IL-13, and inhibited by IFN- $\gamma$ . CCL18 mRNA is also expressed by GM-CSF/IL-4-induced monocyte-derived dendritic cells. *In vivo*, CCL18 is highly expressed in lung and placenta but is not expressed in epidermal Langerhans cells. Recombinant CCL18 has been shown to chemoattract naive T cells but not monocytes or neutrophils.

#### References:

1. Adema, G. *et al.* (1997) *Nature* **387**:713.
2. Kodelja, V. *et al.* (1998) *J. Immunol.* **160**:141.