

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CCL18/PARC in ELISAs and Western blots. In ELISAs, does not cross-react with recombinant human CCL3, 4, 14, 15, 23, recombinant mouse (rm) CCL3, rmCCL4, recombinant viral (rv) MIP-I or rvMIP-II.
Source	Monoclonal Mouse IgG ₁ Clone # 64507
Purification	Protein A or G purified from ascites
Immunogen	<i>E. coli</i> -derived recombinant human CCL18/PARC Ala21-Ala89 Accession # P55774.1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm 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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human CCL18/PARC (Catalog # 394-PA)
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ 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-α (Catalog # 210-TA), Recombinant Human IL-1β/IL-1F2 (Catalog # 201-LB), and LPS, fixed with paraformaldehyde and permeabilized with saponin
Human CCL18/PARC Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human CCL18/PARC Antibody (Catalog # MAB394)
ELISA Detection	0.1-0.4 µg/mL	Human CCL18/PARC Biotinylated Antibody (Catalog # BAF394)
Standard		Recombinant Human CCL18/PARC (Catalog # 394-PA)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CCL18, also known as alternative macrophage activation-associated CC chemokine (AMAC)-1, macrophage inflammatory protein 4 (MIP-4), and dendritic cell chemokine (DC-CK1), is a novel CC chemokine that is highly homologous to MIP-1α (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-γ. 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.