

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CCL23/MPIF-1 in ELISAs and Western blots. In sandwich immunoassays, approximately 10% cross-reactivity with recombinant human (rh) CK β 8-1 (a splice variant of rhMPIF-1) is observed, and less than 0.1% cross-reactivity with rhHCC-1, rhMIP-1 δ , and rhMPIF-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CCL23/MPIF-1 (R&D Systems, Catalog # 371-MP) Arg22-Asn120 Accession # P55773
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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	0.1 μ g/mL	Recombinant Human CCL23/MPIF-1 (Catalog # 371-MP)
Human CCL23/MPIF-1 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Human CCL23/MPIF-1 Antibody (Catalog # MAB3711)
ELISA Detection	0.1-0.4 μ g/mL	Human CCL23/MPIF-1 Biotinylated Antibody (Catalog # BAF371)
Standard		Recombinant Human CCL23/MPIF-1 (Catalog # 371-MP)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Myeloid progenitor inhibitory factor (MPIF-1), also known as CK β 8 and MIP-3, is a member of the CC chemokine subfamily that is designated CCL23. Alternative splicing of the MPIF-1 gene results in two mRNAs that encode a short (CK β 8) and a long (CK β 8-1) isoform of the chemokine. CK β 8 cDNA encodes a 120 amino acid (aa) residue precursor protein with a putative 21 aa residue signal peptide that is cleaved to generate a 99 aa residue mature CK β 8 (aa 22 - 120). Additional N-terminal processing of the 99 aa residue variant can generate a 75 aa residue CK β 8 (aa 46 - 120) that is significantly more active than the 99 aa residue variant. Similarly, CK β 8-1 encodes a 137 aa residue precursor protein that can give rise to a 116 and a 92 aa residue chemokine. Among CC chemokine members, MPIF-1 is most closely related to MIP-5/CCL15 (67% sequence identity) and MIP-1 α /CCL3 (51%). MPIF-1 mRNA is most abundant in the adult lung and liver, but is also present in bone marrow, placenta, and various myelomonocytic cell lines. MPIF-1 has been shown to suppress the low proliferative potential colony-forming cells that give rise to granulocyte and monocyte lineages. MPIF-1 binds to CCR1 with high affinity and has been shown to be a potent chemoattractant and activator of monocytes, dendritic cells, and osteoclast precursors.

References:

1. Patel, V. *et al.* (1997) *J. Exp. Med.* **185**:1163.
2. Youn, B-S. *et al.* (1998) *Blood* **91**:3118.
3. Nardelli, B. *et al.* (1999) *J. Leukoc. Biol.* **61**:822.
4. Berkhout, T.A. *et al.* (2000) *Biochem. Pharmacol.* **59**:591.