



# Anti-Human MCP-4

20150223ML



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

<b>Cat.-no.:</b>	<b>102-P180G</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** Produced from sera of goats pre-immunized with highly pure (>98%) recombinant human MCP-4 (human MCP-4). Anti-human MCP-4 specific antibody was purified by affinity chromatography employing immobilized human MCP-4 matrix.

## Target Background

<b>Synonyms (Target):</b>	CCL13; NCC1; CKb10; MCP-4; NCC-1; SCYL1; SCYA13
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Human MCP-4 or CCL13 cDNA encodes a 98 amino acid residue precursor protein with a 23 amino acid residue hydrophobic signal peptide that is cleaved to yield an 8 kDa, 75 aa mature MPC-4. Mature MPC-4 lacks any potential N-glycosylation sites and shares a pyroglutamate proline motif with other human MCP proteins. Human MCP-4 is most homologous to MCP1, 3 and Eotaxin, exhibiting approximately 65-66% amino acid sequence identity. The mRNA is expressed by a number of activated cell types, including endothelial cells, macrophages, bronchial epithelium and type II alveolar cells, and perhaps lymphocytes. MPC-4 is a chemoattractant for monocytes and eosinophils, and activates basophils. In addition, it has been reported to be chemotactic for CD4+ and CD8+ T cells, with an activity almost equivalent to that of MCP3. The bioactivities of CCL13 is most likely mediated by the CC chemokine receptors CCR2 and CCR3, both of which have been shown to bind CCL13.

### Database References Target

<b>Protein RefSeq:</b>	NP_005399
<b>Uniprot ID:</b>	Q99616
<b>mRNA RefSeq:</b>	NM_005408

## Product Specifications

<b>Species reactivity</b>	Human
<b>Clone/Ab feature</b>	Goat IgG
<b>Cross reactivity</b>	Human
<b>Host</b>	Goat
<b>Clonality</b>	Polyclonal Antibody
<b>Purification</b>	Antigen-affinity purified
<b>Immunogen</b>	Recombinant Human MCP-4
<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 hMCP-4 (100 ng/ml), a concentration of 8-12 µg/ml of this antibody is required.

### ELISA:

**Indirect:** To detect human MCP-4 by indirect ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant human MCP-4.

**Sandwich:** To detect human MCP-4 by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant human MCP-4.

**Western Blot:** To detect human MCP-4 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 human MCP-4 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!**