

DESCRIPTION

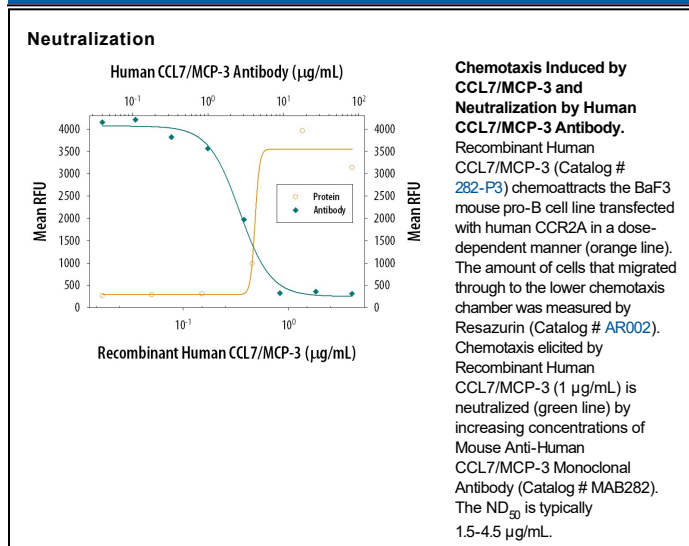
Species Reactivity	Human
Specificity	Detects human CCL7/MCP-3/MARC in ELISAs and Western blots. In ELISAs, no cross-reactivity with recombinant human (rh) CCL2/MCP-1, rhCCL8/MCP-2, or rhCCL13/MCP-4 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 36320
Purification	Protein A or G purified from ascites
Immunogen	<i>E. coli</i> -derived recombinant human CCL7/MCP-3/MARC Gln34-109 Accession # Q7Z7Q8
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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 either lyophilized or 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 CCL7/MCP-3/MARC (Catalog # 282-P3)
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	THP-1 human acute monocytic leukemia cell line fixed with paraformaldehyde and permeabilized with saponin
Human CCL7/MCP-3 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human CCL7/MCP-3/MARC Antibody (Catalog # MAB282)
ELISA Detection	0.1-0.4 µg/mL	Human CCL7/MCP-3/MARC Biotinylated Antibody (Catalog # BAF282)
Standard		Recombinant Human CCL7/MCP-3/MARC (Catalog # 282-P3)
CyTOF-ready		Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.
Neutralization		Measured by its ability to neutralize CCL7/MCP-3/MARC-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR2A. The Neutralization Dose (ND ₅₀) is typically 1.5-4.5 µg/mL in the presence of 1 µg/mL Recombinant Human CCL7/MCP-3/MARC.

DATA



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

MCP-2 and CCL7 are two monocyte chemotactic proteins produced by human MG-63 osteosarcoma cells. Both MCP-2 and CCL7 are members of the C-C family of chemokines and share 62% and 71% amino acid sequence identity, respectively, with MCP-1. CCL7 also shares 58% amino acid identity with MCP-2.

CCL7 cDNA encodes a 99 amino acid residue precursor protein from which the N-terminal 23 amino acid residues are cleaved to generate the 76 amino acid residue mature CCL7. Mature CCL7 contains a potential N-linked and several possible O-linked glycosylation sites.

Similarly to other C-C chemokines, all three MCP proteins are monocyte chemoattractants. In addition, the three MCPs can chemoattract activated NK cells as well as CD4⁺ and CD8⁺ T lymphocytes. All three cytokines have also been shown to attract eosinophils and induce histamine secretion from basophils.