

DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse CCL2/JE/MCP-1 in ELISAs and Western blots. In sandwich immunoassays, less than 0.01% cross-reactivity with recombinant human (rh) MCP-1, rhMCP-2, rhMCP-3, recombinant mouse (rm) MARC, rhMCP-4, rmMCP-5, rmMDC, rmMIP-1α, rmMIP-1β, rmMIP-1γ, rmMIP-2, rmMIP-3β, rmRANTES, rmTARC, and rmTeck is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CCL2/JE/MCP-1 Gln24-Arg96 Accession # Q5SVU3
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. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.	
	Recommended Concentration Sample
Western Blot	0.1 µg/mL See Below
Mouse CCL2/JE/MCP-1 Sandwich Immunoassay	
	Reagent
ELISA Capture	0.2-0.8 µg/mL Mouse CCL2/JE/MCP-1 Antibody (Catalog # AF-479-NA)
ELISA Detection	0.1-0.4 µg/mL Mouse CCL2/JE/MCP-1 Biotinylated Antibody (Catalog # BAF479)
Standard	Recombinant Mouse CCL2/JE/MCP-1 (Catalog # 479-JE)
Neutralization	Measured by its ability to neutralize CCL2/JE/MCP-1-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR2A. The Neutralization Dose (ND ₅₀) is typically 0.5-2.5 µg/mL in the presence of 0.04 µg/mL Recombinant Mouse CCL2/JE/MCP-1.

DATA	
<p>Western Blot</p> <p>Detection of Recombinant Mouse CCL2/JE/MCP-1 by Western Blot. Western blot shows 25 ng of Recombinant Mouse CCL2/JE/MCP-1 (Catalog # 479-JE), Recombinant Human CCL2/JE/MCP-1 (Catalog # 279-MC), Recombinant Rat CCL2/JE/MCP-1 (Catalog # 3144-JE), Recombinant Mouse CCL11/Eotaxin (Catalog # 420-ME), Recombinant Mouse CCL12/MCP-5 (Catalog # 428-P5), and Recombinant Mouse CCL7/MCP-3/MARC (Catalog # 456-MC). PVDF Membrane was probed with 0.1 µg/mL of Goat Anti-Mouse CCL2/JE/MCP-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-479-NA) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for CCL2/JE/MCP-1 at approximately 10 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.</p>	<p>Neutralization</p> <p>Chemotaxis Induced by CCL2/JE and Neutralization by Mouse CCL2/JE Antibody. Recombinant Mouse CCL2/JE (Catalog # 479-JE) chemoattracts the BaF3 mouse pro-B cell line transfected with human CCR2A in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Mouse CCL2/JE (0.04 µg/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse CCL2/JE Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-479-NA). The ND₅₀ is typically 0.5-2.5 µg/mL.</p>

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. *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

Mouse CCL2 is a member of the β (C-C) subfamily of chemokines. The murine *CCL2* gene was initially identified as a platelet-derived growth factor-inducible gene in murine fibroblasts. Mouse CCL2 cDNA encodes a 148 amino acid (aa) residue with a putative 23 aa signal peptide that is cleaved to generate the mature protein. Mouse CCL2 shares 82% amino acid sequence identity with rat CCL2. Mouse CCL2 also shares 55% amino acid sequence identity with human MCP-1. Compared to human MCP-1, mouse CCL2 has a 49 aa residue extension at the carboxy-terminus. Mouse CCL2 has full activity on human cells while human MCP-1 has limited activity on mouse cells.