

DESCRIPTION

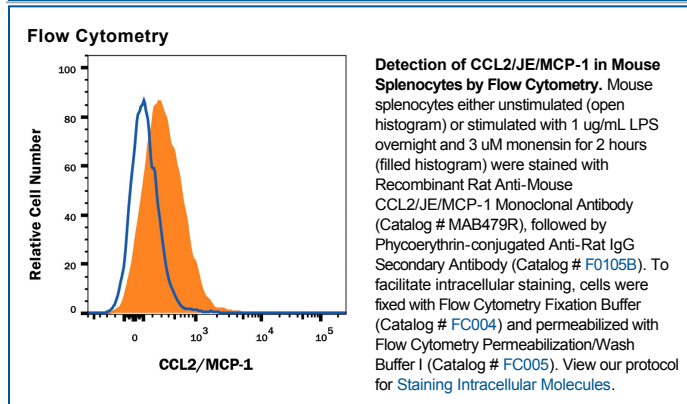
Species Reactivity	Mouse
Specificity	Detects mouse CCL2 in direct ELISAs.
Source	Recombinant Monoclonal Rat IgG _{2B} Clone # 123616R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse CCL2 Gln24-Arg96 Accession # P10148
Formulation	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
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below

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

Mouse CCL2 is a member of the β (C-C) subfamily of chemokines. The mouse CCL2 gene was initially identified as a platelet-derived growth factor-inducible gene in mouse 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. When a DNA sequence encoding the 125 aa residue of the mature CCL2 protein was expressed in *E. coli* at R&D Systems, the purified protein had the predicted N-terminus but a mass of 8525 Da. The truncation of most of the C-terminal extension could be due either to purification artifact or to post-translational modification. The truncated recombinant CCL2 has a potency similar to that of human MCP-1 in the monocyte chemotaxis assay. Mouse CCL2 has full activity on human cells while human MCP-1 has limited activity on mouse cells.

References:

1. Rollins, B.J. *et al.* (1988) Proc. Natl. Acad. Sci. USA **85**:3738.
2. Gu, L. *et al.* (1999) Chem. Immunol. **72**:7.
3. Luini, W. *et al.* (1994) Cytokine **6**:28.