



## RayBiotech, Inc.

3607 Parkway Lane suite 200  
Norcross, GA 30092  
Tel: 770-729-2992, 1-888-494-8555  
Fax: 770-206-2393  
Website: [www.raybiotech.com](http://www.raybiotech.com)  
Email: [info@raybiotech.com](mailto:info@raybiotech.com)

# Certificate of Analysis and Data Sheet

## Mouse Anti Human MCP-1

**Catalog No.**  
IP-14-311

**Target Species**  
Human

**Isotype**  
IgG2a

### Synonyms

Small inducible cytokine A2, CCL2, Monocyte chemotactic protein 1, MCP-1, Monocyte chemoattractant protein 1, Monocyte chemotactic and activating factor, MCAF, Monocyte secretory protein JE, HC11, chemokine (C-C motif) ligand 2, MCP1, SCYA2, GDCF-2, SMC-CF, HSMCR30, MGC9434, GDCF-2 HC11.

### Introduction

Chemokine (C-C motif) ligand 2 (CCL2) is a small cytokine belonging to the CC chemokine family that is also known as monocyte chemotactic protein-1 (MCP-1). It is found at the site of tooth eruption and bone degradation. In the bone, CCL2 is expressed by mature osteoclasts and osteoblasts and is under the control of nuclear factor  $\kappa$ B (NF $\kappa$ B). CCL2 recruits immune cells, such as monocytes, to sites of tissue injury and infection. This chemokine is produced as a protein precursor containing signal peptide of 23 amino acids and a mature peptide of 76 amino acids. It is a monomeric polypeptide, with a molecular weight of approximately 13kDa. As with many other CC chemokines, CCL2 is located on chromosome 17 in humans. The cell surface receptors that bind CCL2 are CCR2 and CCR5.

### Applications

**Table Summary of antibody applications and working conditions**

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA(direct)	.			
Western Blotting	.			
Flow Cytometry			.	
Immunoprecipitation	.			
Immunohistochemistry			.	

Note: 1. Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
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### ***Preparation***

**Immunogen:** Recombinant human MCAF

**Purification Method:** Ion exchange

### ***Formulation***

**Product Type:** Mouse Anti Human Monoclonal

**Shipping Condition:** Antibody is shipped lyophilized at ambient temperature.

**Reconstitution:** Reconstitute with sterile H<sub>2</sub>O. Mix gently, wash the sides of the vial and wait 30-60 seconds before use.

**Protein Concentration:** 1mg/ml in PBS (after reconstitution)

### ***Titer***

In direct ELISA, using alkaline phosphatase goat anti-mouse Ig (Jackson Laboratories) 1:5,000 dilution will give 0.3 O.D within 10 minutes.

### ***Note***

MCAF does not bind to plastic as good as most proteins - use higher concentration for proper binding.

### ***Storage***

In lyophilized form, for long periods, store at 4°C in a dry environment. After reconstitution, if not intended for use within a month, aliquot and store at -20°C.

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