

Datasheet: MCA2486

**BATCH NUMBER 161011**

<b>Description:</b>	MOUSE ANTI HUMAN MCP-1
<b>Specificity:</b>	MCP-1
<b>Other names:</b>	CCL2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2.2-4A4-1A11
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.5 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			10ug/ml
ELISA	▪			1.0 - 2.0ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			0.2 - 0.4ug/ml

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

**(1)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - lyophilised
<b>Reconstitution</b>	Reconstitute with 0.5 ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. For long term storage the addition of 0.09% sodium azide is recommended.

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None present
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml after reconstitution
<b>Immunogen</b>	Recombinant human MCP-1/MCAF ( <a href="#">PHP061</a> )
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P13500</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">6347</a>    CCL2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	MCP1, SCYA2
<b>RRID</b>	AB_2071556
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c X ICR F <sub>1</sub> mice were fused with cells of a mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human MCP-1 antibody, clone 2.2-4A4-1A11</b> recognizes human C-C motif chemokine 2, also known as Monocyte chemoattractant protein 1 (MCP-1), Monocyte chemotactic and activating factor, Monocyte secretory protein JE, Small-inducible cytokine A2 or CCL2, and does not cross react with MCP-2, MCP-3 or other structurally related chemokines. MCP-1 is a 99 amino acid, including a 23 aa signal peptide ~13 kDa chemotactic protein, a chemoattractant for monocytes and basophils but not neutrophils or eosinophils (<a href="#">Weber et al.1996</a>).</p> <p>MCP-1 is produced by a number of cell types, including monocytes, macrophages, microglia, fibroblasts and epithelial cells (<a href="#">Cushing et al. 1990</a>). MCP-1 influences T-cell immunity polarizing responses towards the Th2 phenotype (<a href="#">Karpus and Kennedy 1997</a>). Variations in the CCL2 gene affects susceptibility to <i>Mycobacterium tuberculosis</i> infection (<a href="#">Flores-Villanueva et al. 2005</a>).</p> <p>Mouse anti Human MCP-1 antibody, clone 2.2-4A4-1A11 recognizes both native and recombinant <a href="#">MCP-1</a> in conjunction with Rabbit anti Human <a href="#">MCP-1 polyclonal antibody</a> in a sensitive sandwich ELISA assay.</p>
<b>ELISA</b>	This product may be used in an indirect ELISA or as a capture antibody in a sandwich ELISA together with <a href="#">AHP784B</a> as the detection reagent and <a href="#">PHP061</a> as the standard.

<b>Histology Positive Control Tissue</b>	Human Breast Invasive Ductal Carcinoma
<b>Western Blotting</b>	This product may be used under either reducing or non-reducing conditions together with <a href="#">PHP061</a> as the positive control.
<b>References</b>	<ol style="list-style-type: none"> <li>Johansson, U. <i>et al.</i> (2008) Formation of composite endothelial cell-mesenchymal stem cell islets: a novel approach to promote islet revascularization. <a href="#">Diabetes. 57: 2393-401.</a></li> <li>Nio-Kobayashi J <i>et al.</i> (2015) Regulated C-C motif ligand 2 (CCL2) in luteal cells contributes to macrophage infiltration into the human corpus luteum during luteolysis. <a href="#">Mol Hum Reprod. pii: gav028.</a></li> <li>Chuang, L.P. <i>et al.</i> (2016) Increased MCP-1 gene expression in monocytes of severe OSA patients and under intermittent hypoxia. <a href="#">Sleep Breath. 20 (1): 425-33.</a></li> </ol>
<b>Storage</b>	<p>Prior to reconstitution store at -20°C. After reconstitution store at -20°C.</p> <p>This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10162 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2486">https://www.bio-rad-antibodies.com/SDS/MCA2486</a> 10162
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M372572:200706'

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