Datasheet: MCA2486

Description:	MOUSE ANTI HUMAN MCP-1
Specificity:	MCP-1
Other names:	CCL2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2.2-4H5-1A11
Isotype:	IgG1
Quantity:	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.

	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**.

Target Species

Human

Product Form

Purified IgG - lyophilized

Reconstitution

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.

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml after reconstitution
Immunogen	Recombinant human MCP-1/MCAF (PHP061)
External Database Links	**UniProt:** P13500 Related reagents **Entrez Gene:** 6347 CCL2 Related reagents
Synonyms	MCP1, SCYA2
RRID	AB_2071556
Fusion Partners	Spleen cells from immunized BALB/c X ICR F_1 mice were fused with cells of a mouse myeloma cell line.
Specificity	**Mouse anti Human MCP-1 antibody, clone 2.2-4H5-1A11** 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 (Weber *et al.*1996). MCP-1 is produced by a number of cell types, including monocytes, macrophages, microglia, fibroblasts and epithelial cells (Cushing *et al.* 1990). MCP-1 influences T-cell immunity polarizing responses towards the Th2 phenotype (Karpus and Kennedy 1997). Variations in the CCL2 gene affects susceptibility to *Mycobacteriun tuberculosis* infection (Flores-Villanueva *et al.* 2005). Mouse anti Human MCP-1 antibody, clone 2.2-4H5-1A11 recognizes both native MCP-1 and recombinant MCP-1
ELISA	This product may be used in an indirect ELISA or as a capture antibody in a sandwich ELISA together with PHP061 as the standard.

Histology Positive Control Tissue	Human Breast Invasive Ductal Carcinoma
Western Blotting	This product may be used under either reducing or non-reducing conditions together with PHP061 as the positive control.
References	1. Johansson, U. *et al.* (2008) Formation of composite endothelial cell-mesenchymal stem cell islets: a novel approach to promote islet revascularization. Diabetes. 57: 2393-401. 2. Nio-Kobayashi J *et al.* (2015) Regulated C-C motif ligand 2 (CCL2) in luteal cells contributes to macrophage infiltration into the human corpus luteum during luteolysis. Mol Hum Reprod. pii: gav028. 3. Chuang, L.P. *et al.* (2016) Increased MCP-1 gene expression in monocytes of severe OSA patients and under intermittent hypoxia. Sleep Breath. 20 (1): 425-33.
Storage	Prior to reconstitution store at -20°C. After reconstitution store at -20°C. 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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10294 available at: https://www.bio-rad-antibodies.com/SDS/MCA2486 10294
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South America Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21
Fax: +49 (0) 89 8090 95 50
Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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