

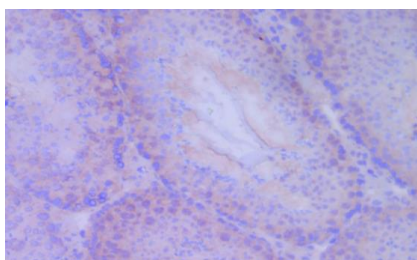
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	MCP-1, Mouse, clone ECE.2		
Catalog number	HM1019-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.02%NaN3+0.1%BSA	Concentration	100 µg/ml
Host Species	Rat IgG1	Conjugate	None
Endotoxin	N.A.	Purification	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	3							1
Yes	•							•
No		•						
N.D.			•	•	•	•	•	

N.D. = Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



IHC-F: detection of MCP-1 in mouse testis. The antibody has been used in a 10x dilution, the magnification was 200x.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- IHC-F: F: Sections (6 µm) were fixed with 4% PFA, blocked using 0.1% Triton-X and 5% serum for 15min at 37°C or o/n 4 °C and then incubated with 2 µg/ml antibody for 2h at 37°C.
- W: Samples electrophoresed on 15% SDS-PAGE were blotted on nitrocellulose and blocked with PBS/5% low fat dry milk. The blot was incubated with antibody (0.8 µg/ml) for 20min at RT.

General Information

Description The monoclonal antibody ECE.2 recognizes mouse monocyte chemoattractant protein 1 (MCP-1). The murine JE gene encodes the monocyte-specific cytokine monocyte chemotactic protein 1 (MCP-1). MCP-1 is a CC chemokine of 76 amino acids (~11 kDa) and is chemotactic for monocytes and basophils but not neutrophils and eosinophils. MCP-1 is expressed by smooth muscle cells (SMC), macrophages, endothelial cells, keratinocytes and fibroblasts in response to inflammatory stimuli such as interleukin 1β and tumor necrosis factor α. MCP-1 has been implicated in a variety of inflammatory processes, including inflammatory bowel disease, rheumatoid arthritis, asthma, nephritis, and parasitic and viral infections. MCP-1 antigen is not detected in the endothelium or SMC of normal arteries. MCP-1 has also been shown to exhibit biological activities other than chemotaxis. It can induce the proliferation and activation of killer cells known as CHAK (CC-Chemokine-activated killer). MCP-1 signals via the CCR2 receptor, and is critical for aneurysm formation because of its stability to recruit leukocytes. These leukocytes produce extracellular matrix-degrading MMPs, thereby inducing aortic remodelling and dilatation. Interleukin-6 is also involved in this amplification loop accelerating vascular inflammation. MCP-/- mice display significantly delayed wound re-epithelialization, and also delayed wound angiogenesis.

Immunogen Synthetic peptide corresponding to residues 102-130 of mouse MCP-1

Aliases	C-C motif chemokine 2, Monocyte chemotactic and activating factor, Monocyte secretory protein JE, Small-inducible cytokine A2, Sigje
Gene	Gene name: Ccl2
Cross reactivity	Human MCP-1: No
References	<ol style="list-style-type: none"> 1. Zoja, C et al; Renal expression of monocyte chemoattractant protein-1 in lupus autoimmune mice. J Am Soc Nephrol 1997, 8: 720 2. Kimura, Y et al; Facilitating action of asiaticoside at low doses on burn wound repair and its mechanism. Eur J Pharmacol 2008, 584: 415 3. Tieu, B et al. An adventitial IL-6/MCP1 amplification loop accelerates macrophage-mediated vascular inflammation leading to aortic dissection in mice. J Clin Invest 2009, 119: 3637
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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Approved by Manager of QC
Brenda Teunissen

Date
26/10/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.