

PRODUCT INFORMATION



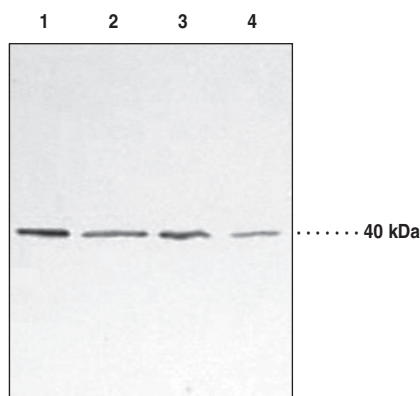
p38 MAPK Monoclonal Antibody (Clone 9F12)

Item No. 10011301

Overview and Properties

Contents:	This vial contains 200 µg of affinity-purified monoclonal antibody.
Synonyms:	p38 MAPKa, p38 MAP Kinase, p38 Mitogen-activated Protein Kinase
Immunogen:	Human full length p38 MAPK
Cross Reactivity:	(+) Human, mouse, and rat p38 MAPK; other species not tested.
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	500 µl PBS, pH 7.4, with 50% glycerol, 0.5 mg/ml BSA, and 0.02% sodium azide
Clone:	9F12
Host:	Mouse
Isotype:	IgG1
Applications:	Flow cytometry (FC), immunocytochemistry (ICC), and Western blot (WB). The recommended starting dilution for ICC and FC is 1:40 (10 µg/ml) and 1:200 (2 µg/ml) for WB. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

Image



Lane 1: Human platelet lysate (25 µg)
Lane 2: Jurkat cell lysate (25 µg)
Lane 3: RAW 264.7 cell lysate (50 µg)
Lane 4: Rat heart supernatant (25 µg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

p38 mitogen-activated protein kinase (MAPK) is a member of the serine-threonine MAPK family that triggers many cellular processes including cell cycle, development, and apoptosis.^{1,2} These kinases are activated by environmental stress signals such as osmotic shock, infection, and cytokines causing phosphorylation of p38 MAPK. This results in a phosphorylation cascade, activating transcription factors, and inducing gene expression.^{1,3} p38 MAPK is widely expressed in heart, brain, skeletal muscle, platelets, and immune cells. Due to this distribution, p38 MAPK plays a role in cardiovascular disease, arthritis, and cancer.²⁻⁵ It is mainly present in the cytosol, but can also be found in the nucleus after activation.¹ Based on the amino acid sequence, the expected molecular weight of this protein is 41 kDa.

References

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2. Dhillon, A.S., Hagan, S., Rath, S., *et al.* MAP kinase signalling pathways in cancer. *Oncogene* **26**, 3279-3290 (2007).
3. Wang, Y. Mitogen-activated protein kinases in heart development and diseases. *Circulation* **116**, 1413-1423 (2007).
4. Schett, G., Zwerina, J., and Firestein, G. The p38 mitogen activated protein kinase (MAPK) pathway in rheumatoid arthritis. *Ann. Rheum. Dis.* **67**, 909-916 (2007).
5. Cook, R., Wu, C.-C., Kang, Y.J., *et al.* The role of the p38 pathway in adaptive immunity. *Cellular & Molecular Immunology* **4(4)**, 253-259 (2007).

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