

Product Name

Mouse Anti-Human P38 α (MAPKinase) Monoclonal
Antibody Hybridoma Cell Line

Cat No.

CC0101SC



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Applications

ELISA (E), Western (WB), Immunoprecipitation (IP)

Formulation

2 x 10⁶ – 2 x 10⁷ cells/ml in freezing media. 10% dimethyl-
sulfoxide (DMSO) and 90% Fetal Bovine Serum (FBS).
Product is frozen.

Cross Reactivity

Tested for cross reactivity with closely related human kinases.

No cross reactivity detected.

Clone Information

Designation - 9F12

Organism - Mus musculus (B Cell)

Growth - Suspension DMEM +5-10% FBS

Myeloma - SP2/0 Mus musculus

Morphology - Lymphoblast

Background

P38 α (SAPK2A) is a member of the P38 MAPK family which are activated by various environmental stresses and proinflammatory cytokines (1). The activation of p38 requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase (2). The substrates of p38 include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response.

References

1. Han, J. et al: A MAP kinase targeted by endotoxin and hyperosmolarity in mammalian cells. *Science* 265: 808-811, 1994.
2. Ge, B. et al: MAPKK-independent activation of p38-alpha mediated by TAB1-dependent autophosphorylation of p38-alpha. *Science* 295: 1291-1294, 2002.

Concentration

10ml of a log phase culture (2 x 10⁵ cells/ml) per
1mL vial - frozen

Immunogen

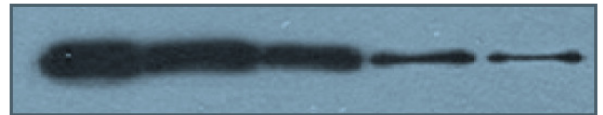
Full-length recombinant protein expressed in E.
Coli cells. The purity was determined to be >90%
by densitometry. Approx. MW 38kDa.

Stability

Store in liquid nitrogen.

Host/Isotype

IgG1 / mouse

Sample Data

lane	1	2	3	4	5
loading	0.25 ug	167 ng	56 ng	18.5 ng	6.2 ng

Expressed P38 α was separated by SDS-PAGE at the indicated loading amounts. The full length protein was probed with mouse monoclonal antibody 9F12 from dilute tissue culture supernatant. Mouse mAb 9F12 was detected with a goat anti-mouse HRPO secondary antibody and developed by chemiluminescence.

Gene/Protein Aliases

CSBP1; CSBP2; CSPB1; PRKM14; PRKM15; SAPK2A;
MAPK14

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