

#4092 Store at -20°C

Phospho-p38 MAPK (Thr180/Tyr182) (3D7) Rabbit mAb (Biotinylated)

100 µl
 (10 western blots)



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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

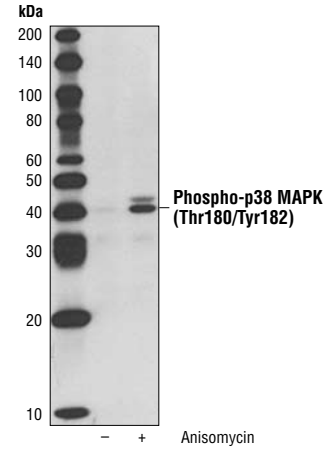
Applications	Species Cross-Reactivity	Molecular Wt.	Isotype
W, F Endogenous	H, M, R, Mk, Pg, Sc, Dm	43 kDa	Rabbit IgG

Description: This Cell Signaling Technology (CST) antibody is conjugated to biotin under optimal conditions. The unconjugated Phospho-p38 MAPK (Thr180/Tyr182) (3D7) Rabbit mAb #9215 reacts with human, mouse, rat, monkey, pig, *S. cerevisiae*, and *D. melanogaster* phospho-p38 MAPK kinase (Thr180/Tyr182). CST expects that Phospho-p38 MAP Kinase (Thr180/Tyr182) (3D7) Rabbit mAb (Biotinylated) will also recognize phospho-p38 MAP kinase (Thr180/Tyr182) in these species.

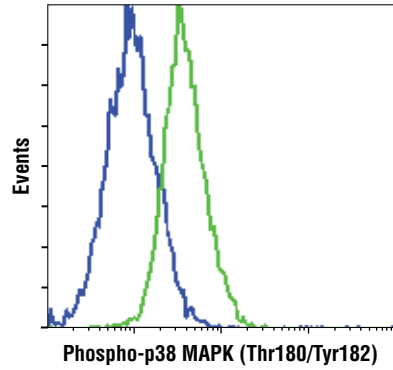
Background: p38 MAP kinase (MAPK), also called RK (1) or CSBP (2), is the mammalian orthologue of the yeast HOG kinase that participates in a signaling cascade controlling cellular responses to cytokines and stress (1-4). Four isoforms of p38 MAP kinase, p38α, β, γ (also known as ERK6 or SAPK3) and δ (also known as SAPK4) have been identified. Similar to the SAPK/JNK pathway, p38 MAP kinase is activated by a variety of cellular stresses including osmotic shock, inflammatory cytokines, lipopolysaccharides (LPS), UV light and growth factors (1-5). MKK3, MKK6 and SEK activate p38 MAP kinase by phosphorylation at Thr180 and Tyr182. Activated p38 MAP kinase has been shown to phosphorylate and activate MAPKAP kinase 2 (3) and to phosphorylate the transcription factors ATF-2 (5), Max (6) and MEF2 (5-8).

Specificity/Sensitivity: Phospho-p38 MAP Kinase (Thr180/Tyr182) (3D7) Rabbit mAb (Biotinylated) detects endogenous levels of p38 MAPK only when phosphorylated at both Thr180 and Tyr182. This antibody does not cross-react with the phosphorylated forms of either p42/44 MAPK or SAPK/JNK.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide (KLH-coupled) corresponding to residues surrounding Thr180/Tyr182 of human p38 MAPK.



Western blot analysis of p38 MAPK Control Cell Extracts #9213, untreated or anisomycin-treated, using Phospho-p38 MAPK (Thr180/Tyr182) (3D7) Rabbit mAb (Biotinylated).



Flow cytometric analysis of Jurkat cells, untreated (blue) or anisomycin-treated (green), using Phospho-p38 MAPK (Thr180/Tyr182) (3D7) Rabbit mAb (Biotinylated).

Entrez-Gene ID #1432
Swiss-Prot Acc. #Q16539

Storage: Supplied in 136 mM NaCl, 2.6 mM KCl, 12 mM sodium phosphate (pH 7.4) dibasic, 2 mg/ml BSA, 50% glycerol. Store at -20°C. Do not aliquot antibody.

Biotinylated antibodies are designed to be detected using streptavidin conjugates.

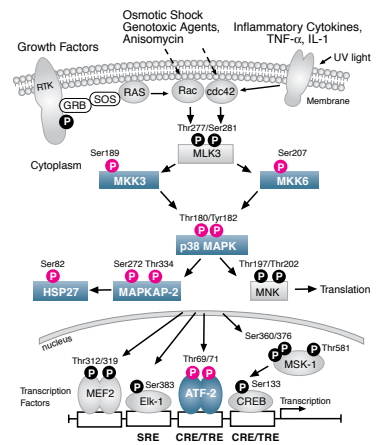
Recommended Antibody Dilutions:

Western blotting	1:1000
Flow Cytometry	1:800

- Background References:**
- (1) Rouse, J. et al. (1994) *Cell* 78, 1027-1037.
 - (2) Han, J. et al. (1994) *Science* 265, 808-811.
 - (3) Lee, J.C. et al. (1994) *Nature* 372, 739-746.
 - (4) Freshney, N.W. et al. (1994) *Cell* 78, 1039-1049.
 - (5) Raingeaud, J. et al. (1995) *J. Biol. Chem.* 270, 7420-7426.
 - (6) Zervos, A.S. et al. (1995) *Proc. Natl. Acad. Sci. USA* 92, 10531-10534.
 - (7) Zhao, M. et al. (1999) *Mol. Cell. Biol.* 19, 21-30.
 - (8) Yang, S.H. et al. (1999) *Mol. Cell. Biol.* 19, 4028-4038.

For application specific protocols please see the web page for this product at www.cellsignal.com.

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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