

#2339 Store at -20°C

p38 β MAP Kinase (C28C2) Rabbit mAb

✓ 100 μ l
(10 western blots)



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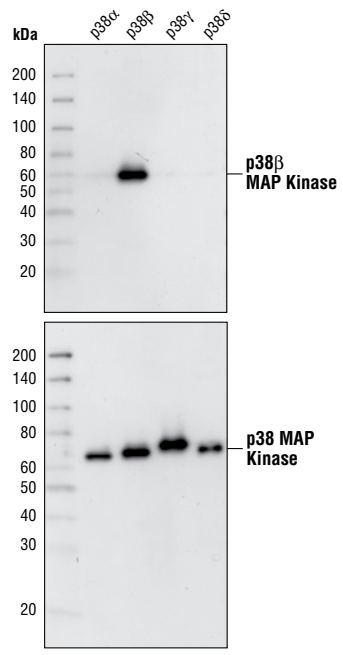
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP Endogenous	H, Mk	43 kDa	Rabbit IgG**

Background: p38 MAP kinase (MAPK), also called RK (1) or CSBP (2), is the mammalian orthologue of the yeast HOG kinase which participates in a signaling cascade controlling cellular responses to cytokines and stress (1–4). Four isoforms of p38 MAP kinase, p38 α , 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 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).

Although there are many similarities between the four p38 isoforms, there are also some important differences that suggest that the various members may regulate specific functions, and the presence of multiple p38 isoforms may provide a mechanism for the generation of tissue-specific or stimulus-specific responses to the activation of the p38 signal transduction pathway (9,10).

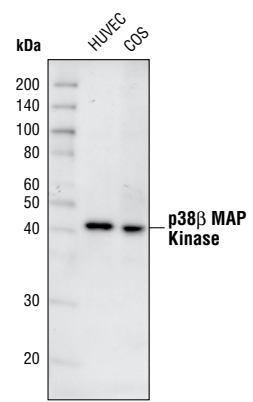
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Western blot analysis of purified recombinant full-length p38 MAP kinase GST-fusion proteins, using p38 β MAP Kinase (C28C2) Rabbit mAb (upper), or a p38 MAP kinase pan antibody (lower).

Specificity/Sensitivity: p38 β MAP Kinase (C28C2) Rabbit mAb detects endogenous levels of total p38 β MAP kinase protein. This antibody does not cross-react with other isoforms of p38 MAP kinase.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues around the carboxy terminus of p38 β MAPK.



Western blot analysis of extracts from HUVEC and COS cells using p38 β MAP Kinase (C28C2) Rabbit mAb.

Entrez-Gene ID #5600
Swiss-Prot Acc. #Q15759

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50

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

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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.
- (9) Fearn, C. et al. (2000) *J. Leukoc. Biol.* 67, 705–711.
- (10) Hale, K.K. et al. (1999) *J. Immunol.* 162, 4246–4252.

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.