

#9231 Store at -20°C

Phospho-MKK3 (Ser189)/MKK6 (Ser 207) Antibody

100 µl
 (10 western blots)



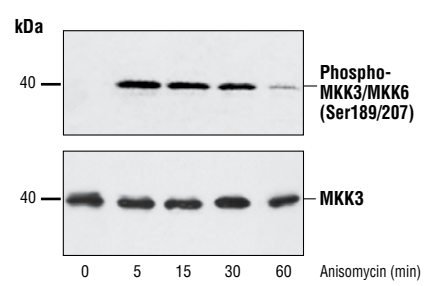
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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R	40 kDa Phospho-MKK3 41 kDa Phospho-MKK6	Rabbit**

Background: MKK3 and MKK6 are two closely related dual-specificity protein kinases that activate p38 MAP kinase (1-5). MKK3 and MKK6 both phosphorylate and activate p38 MAP kinase at its activation site Thr-Gly-Tyr but do not phosphorylate or activate Erk1/2 or SAPK/JNK. Phosphorylation of p38 MAP kinase dramatically stimulates its ability to phosphorylate protein substrates such as ATF-2 and Elk-1. MKK3 and MKK6 are both activated by different forms of cellular stress and inflammatory cytokines (4,5). Activation of MKK3 and MKK6 occurs through phosphorylation of serine and threonine residues at sites Ser189 and Thr193 for MKK3 (2) and Ser207 and Thr211 for MKK6 (4,5).



Western blot analysis of extracts from NIH/3T3 cells, untreated or anisomycin-treated for the indicated times using Phospho-MKK3/MKK6 (Ser189/207) Antibody (upper) or MKK3 Antibody #9232 (lower).

Specificity/Sensitivity: Phospho-MKK3/MKK6 (Ser189/207) Antibody detects endogenous levels of MKK3/MKK6 only when phosphorylated at Ser189/207. The antibody does not recognize the corresponding phosphorylated residues of MEK1, MEK2 or MKK4/SEK1.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues around Ser189/207 of human MKK3. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- Derijard, B. et al. (1995) *Science* 267, 682-685.
- Raingeaud, J. et al. (1995) *J. Biol. Chem.* 270, 7420-7426.
- Sluss, H.K. et al. (1994) *Mol. Cell. Biol.* 14, 8376-8384.
- Raingeaud, J. et al. (1996) *Mol. Cell. Biol.* 16(3), 1247-1255.
- Han, J. et al. (1996) *J. Biol. Chem.* 271, 2886-2891.

Entrez-Gene ID # 5606, 5608
Swiss-Prot Acc. # P46734, P52564

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

*Species cross-reactivity is determined by Western blot.

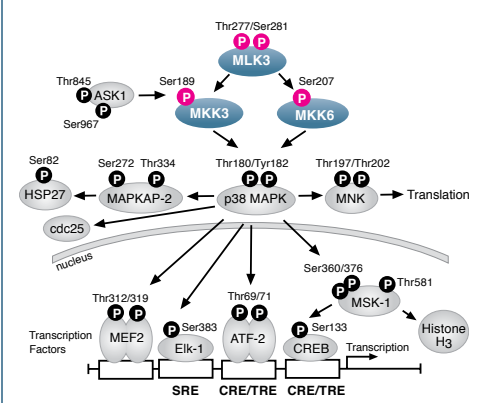
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western Blotting 1:1000

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.



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.