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Phospho-MKK3 (Ser189)/MKK6 (Ser207) (22A8) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	40 P-MKK3, 41 P-MKK6	Rabbit IgG	#P46734, #P52564	5606, 5608

Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:100
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	Phospho-MKK3/MKK6 (Ser189/207) (22A8) Rabbit mAb detects endogenous levels of MKK3/MKK6 only when phosphorylated at serine189/207. The antibody does not recognize the corresponding phosphorylated residues of MEK1, MEK2 or MKK4/SEK1.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser189/207 of human MKK3.	
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 at Ser189 and Thr222 on MKK3 (2) and Ser207 and Thr211 on MKK6 (4,5).	
Background References	1. Derijard, B. et al. (1995) <i>Science</i> 267, 682-685. 2. Raingeaud, J. et al. (1995) <i>J. Biol. Chem.</i> 270, 7420-7426. 3. Sluss, H.K. et al. (1994) <i>Mol. Cell. Biol.</i> 14, 8376-8384. 4. Raingeaud, J. et al. (1996) <i>Mol. Cell. Biol.</i> 16(3), 1247-1255. 5. Han, J. et al. (1996) <i>J. Biol. Chem.</i> 271, 2886-2891.	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting IP: Immunoprecipitation
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus 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 GP: Guinea Pig Rab: rabbit All: all species expected
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