

#8535 Store at -20C

MKK3 (D4C3) 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	38-40	Rabbit IgG	#P46734	5606

Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	1:200
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	MKK3 (D4C3) Rabbit mAb recognizes endogenous levels of total MKK3 protein. This antibody cross-reacts slightly with MKK6 but demonstrates an approximate 10-fold preference for MKK3 using recombinant, purified proteins.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human MKK3 protein.	
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	<ol style="list-style-type: none"> Derijard, B. et al. (1995) <i>Science</i> 267, 682-685. Raingeaud, J. et al. (1995) <i>J. Biol. Chem.</i> 270, 7420-7426. Sluss, H.K. et al. (1994) <i>Mol. Cell. Biol.</i> 14, 8376-8384. Raingeaud, J. et al. (1996) <i>Mol. Cell. Biol.</i> 16(3), 1247-1255. 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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