

#7419 Store at -20°C

MAPKAPK-5 (D70A10) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H R Mk	Endogenous	58	Rabbit IgG	#Q8IW41	8550

Product Usage Information	Application Western Blotting	Dilution 1:1000
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	MAPKAPK-5 (D70A10) Rabbit mAb recognizes endogenous levels of total MAPKAPK-5 protein. This antibody does not cross-react with MAPKAPK-2 or MAPKAPK-3.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly367 of human MAPKAPK-5 protein.	
Background	MAPKAPK-5 belongs to the mitogen-activated protein kinase (MAPK) activated protein kinases (MK) subfamily that includes MAPKAPK-2/MK2 and MK3/3pK. The MK subfamily is part of a family of protein kinase subfamilies downstream of MAPK pathways and includes ribosomal S6 kinase (RSKs), mitogen and stress activated kinases (MSKs) and MAPK-interacting kinases (MNKS). All MKs are activated by MAPK pathways and mediate important processes (e.g. gene expression, cell cycle progression) and have been implicated in inflammation and cancer (1,2). MAPKAPK-5 shows binding to and activation by p38 MAPK and extracellular-regulated kinases (Erk) (3,4). MAPKAPK-5 was shown to be activated by Erk3 and act as a chaperone to Erk3 (5,6). While overexpressed MAPKAPK-5 shares similar substrates with MAPKAPK-2, such as HSP27 and glycogen synthase, recent work with MAPKAPK-5 knock-out mice indicates distinct substrates and functional properties (7).	
Background References	<ol style="list-style-type: none"> 1. Roux, P.P. and Blenis, J. (2004) <i>Microbio. Mol. Biol. Rev.</i> 68, 320-344. 2. Gaestel, M. (2006) <i>Nat. Rev. Mol. Cell Biol.</i> 7, 120-130. 3. New, L. et al. (1998) <i>EMBO J.</i> 17, 3372-3384. 4. Ni, H. et al. (1998) <i>Biochem. Biophys. Res. Commun.</i> 243, 492-496. 5. Schumacher, S. et al. (2004) <i>EMBO J.</i> 23, 4770-4779. 6. Seternes, O.M. et al. (2004) <i>EMBO J.</i> 23, 4780-4791. 7. Shi, Y. et al. (2003) <i>Mol. Cell Biol.</i> 23, 7732-7741. 	

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
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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