

#7421 Store at -20C

## MAPKAPK-3 (D54E4) Rabbit mAb



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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk Pg	Endogenous	42	Rabbit IgG	#Q16644	7867

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	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.	
<b>Specificity / Sensitivity</b>	MAPKAPK-3 (D54E4) Rabbit mAb recognizes endogenous levels of total MAPKAPK-3 protein. This antibody does not cross-react with MAPKAPK-2 or MAPKAPK-5.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro34 of human MAPKAPK-3 protein.	
<b>Background</b>	MAPKAPK-3 has a single potential SH3-binding site in the proline-rich amino terminus, a putative ATP-binding site, 2 MAP kinase phosphorylation site motifs, and a putative nuclear localization signal. It shares 72% nucleotide and 75% amino acid identity with MAPKAPK-2 (1). MAPKAPK-3 has been shown to be activated by growth inducers and stress stimulation of cells. <i>In vitro</i> studies have demonstrated that Erk, p38 MAP kinase, and Jun amino-terminal kinase are able to phosphorylate and activate MAPKAPK-3, which suggested a role for this kinase as an integrative element of signaling in both mitogen and stress responses (2). MAPKAPK-3 was reported to interact with, phosphorylate, and repress the activity of E47, which is a basic helix-loop-helix transcription factor involved in the regulation of tissue-specific gene expression and cell differentiation (3). MAPKAPK-3 may also support luteal maturation through the phosphorylation and activation of the nuclear transcription factor CREB (4).	
<b>Background References</b>	1. Sithanandam, G. et al. (1996) <i>Mol. Cell Biol.</i> 16, 868-876. 2. Ludwig, S. et al. (1996) <i>Mol. Cell Biol.</i> 16, 6687-6697. 3. Neufeld, B. et al. (2000) <i>J. Biol. Chem.</i> 275, 20239-20242. 4. Maizels, E.T. et al. (2001) <i>Mol. Endocrinol.</i> 15, 716-733.	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	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.
<b>Applications Key</b>	<b>WB:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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