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#9152

SEK1/MKK4 Antibody

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

Applications: W, IP	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 44	Source/Isotype: Rabbit	UniProt ID: #P45985	Entrez-Gene Id: 6416
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Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:50
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.	
Specificity/Sensitivity	SEK1/MKK4 Antibody detects endogenous levels of total SEK1/MKK4 protein. This antibody does not cross-react with MEK1, MEK2 or MKK3.	
Species predicted to react based on 100% sequence homology	Dog	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding the N-terminus of human SEK1/MKK4. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	SAPK/Erk kinase (SEK1), also known as MKK4 or Jun kinase kinase (JNKK), activates the MAP kinase homologues SAPK and JNK in response to various cellular stresses and inflammatory cytokines (1-3). Activation of SEK1 occurs through MEKK phosphorylation of serine and threonine residues at positions 257 and 261, respectively. Like MEK, SEK is a dual-specificity protein kinase that phosphorylates SAPK/JNK at a conserved T*PY* site in its activation loop (4). Phosphorylation by Akt at Ser80 inhibits SEK1 and suppresses stress-activated signal transduction (5).	
Background References	<ol style="list-style-type: none"> Davis, R.J. (1994) <i>Trends Biochem. Sci.</i> 19, 470-473. Sanchez, I. et al. (1994) <i>Nature</i> 372, 794-798. Yan, M. et al. (1994) <i>Nature</i> 372, 798-800. Kyriakis, J.M. et al. (1994) <i>Nature</i> 369, 156-160. Park, H. et al. (2002) <i>J. Biol. Chem.</i> 277, 2573-2578. 	

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	W: Western Blotting IP: Immunoprecipitation
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey
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