

Store at -20°C
#9155

Phospho-SEK1/MKK4 (Ser80) Antibody



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	44	Rabbit	#P45985	6416

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 and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	Phospho-SEK1/MKK4 (Ser80) Antibody detects endogenous levels of SEK1/MKK4 only when phosphorylated at serine 80. This antibody does not cross-react with the corresponding phosphorylated residues of MEK1, MEK2 or MKK3.	
Species predicted to react based on 100% sequence homology:	Xenopus	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser80 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"> 1. Davis, R.J. (1994) <i>Trends Biochem. Sci.</i> 19, 470-473. 2. Sanchez, I. et al. (1994) <i>Nature</i> 372, 794-798. 3. Yan, M. et al. (1994) <i>Nature</i> 372, 798-800. 4. Kyriakis, J.M. et al. (1994) <i>Nature</i> 369, 156-160. 5. 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	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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