

#9591 Store at -20°C

Phospho-MSK1 (Ser376) 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	90	Rabbit	#O75582	9252

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-MSK1 (Ser376) Antibody detects endogenous levels of MSK1 only when phosphorylated at Ser376. The antibody does not recognize MSK1 phosphorylated at other sites, nor does it recognize phosphorylated RSK1, RSK2 or RSK3. This antibody may cross react with MSK2.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser376 of human MSK1. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	MSK1, a mitogen and stress activated protein kinase, is activated by Erk as well as p38 MAPK in response to growth factors and cellular stress, respectively (1). MSK1 resembles RSK because it has two kinase domains connected by a regulatory linker region (2). Phosphorylation of RSK1 at Ser364 and Ser381 is critical for RSK1 activity (3). These sites are analogous to Ser360 and Ser376 of MSK1, which may be important for MSK1 activity as well.	
Background References	<ol style="list-style-type: none"> 1. Deak, M. et al. (1998) <i>EMBO J.</i> 17, 4426-4441. 2. Pierrat, B. et al. (1998) <i>J. Biol. Chem.</i> 273, 29661-29671. 3. Dalby, K. et al. (1998) <i>J. Biol. Chem.</i> 273, 1496-1505. 4. Markou, T. and Lazou, A. (2002) <i>Biochem J</i> 365, 757-63. 5. Markou, T. et al. (2004) <i>J Mol Cell Cardiol</i> 37, 1001-11. 	

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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