

#9595 Store at -20C

## Phospho-MSK1 (Thr581) 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, IP	H M	Endogenous	90	Rabbit	#O75582	9252

<b>Product Usage Information</b>	<b>Application</b> Western Blotting Immunoprecipitation	<b>Dilution</b> 1:1000 1:200
<b>Storage</b>	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.	
<b>Specificity / Sensitivity</b>	Phospho-MSK1 (Thr581) Antibody detects endogenous levels of MSK1 only when phosphorylated at Thr581. This antibody does not cross-react with MSK1 phosphorylated at other sites, nor does it detect phosphorylated RSK1, RSK2 or RSK3.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Thr581 of human MSK1. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	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.	
<b>Background References</b>	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.	

<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>IP:</b> Immunoprecipitation
<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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