

Phospho-MSK1 (Ser376) Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	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

1. Deak, M. et al. (1998) *EMBO J.* 17, 4426-4441.
2. Pierrat, B. et al. (1998) *J. Biol. Chem.* 273, 29661-29671.
3. Dalby, K. et al. (1998) *J. Biol. Chem.* 273, 1496-1505.
4. Markou, T. and Lazou, A. (2002) *Biochem J* 365, 757-63.
5. Markou, T. et al. (2004) *J Mol Cell Cardiol* 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

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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