

Store at -20C  
#8142

## Phospho-Thr-Pro-Arg Motif [pTPR] MultiMab® Rabbit mAb mix



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

<b>Applications:</b> WB	<b>Reactivity:</b> All	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Rabbit IgG
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<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<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-Thr-Pro-Arg Motif [pTPR] Rabbit mAb detects endogenous levels of proteins only when phosphorylated at the threonine within the TPR motif. This antibody does not cross-react with phospho-serine or phospho-threonine residues in a different context.	
<b>Source / Purification</b>	MultiMab® rabbit monoclonal mix antibodies are prepared by combining individual rabbit monoclonal clones in optimized ratios for the approved applications. Each antibody in the mix is carefully selected based on motif recognition and performance in multiple assays. Each mix is engineered to yield the broadest possible coverage of the modification being studied while ensuring a high degree of specificity for the modification or motif.	
<b>Background</b>	The MAPK and CDK families of serine/threonine protein kinases play important roles in proliferation and cell cycle control. These kinases phosphorylate threonine or serine residues that are followed by a proline residue (1-3). MAPK phosphorylates substrates with the consensus sequence PX(S/T)P and CDKs phosphorylate substrates containing the consensus sequence (S/T)PXR/K (4,5). Some signaling molecules can be regulated by phosphorylation at a specific threonine followed by an arginine or lysine at the +2 position. For example, conventional PKC isozymes phosphorylate substrates containing a serine or threonine with Arg or Lys at the -3, -2 and +2 positions (6,7).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Cross, T.G. et al. (2000) <i>Exp Cell Res</i> 256, 34-41.</li> <li>2. Reynolds, C.H. et al. (2000) <i>J Neurochem</i> 74, 1587-95.</li> <li>3. Seger, R. and Krebs, E.G. (1995) <i>FASEB J</i> 9, 726-35.</li> <li>4. Holmes, J.K. and Solomon, M.J. (1996) <i>J Biol Chem</i> 271, 25240-6.</li> <li>5. Songyang, Z. et al. (1996) <i>Mol Cell Biol</i> 16, 6486-93.</li> <li>6. Nishikawa, K. et al. (1997) <i>J Biol Chem</i> 272, 952-60.</li> <li>7. Pearson, R.B. and Kemp, B.E. (1991) <i>Methods Enzymol</i> 200, 62-81.</li> </ol>	

<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>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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