

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**#4391** Store at -20C

## Phospho-MAPK Substrates (PXT<sup>P</sup>) (46G11) Rabbit mAb

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

<b>Applications:</b> W, IP, IHC-P, FC-FP, E-P	<b>Reactivity:</b> H All	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Rabbit IgG
<b>Product Usage Information</b>	<b>Application</b>	<b>Dilution</b>	
	Western Blotting	1:1000	
	Immunoprecipitation	1:50	
	Immunohistochemistry (Paraffin)	1:600	
	Flow Cytometry (Fixed/Permeabilized)	1:100	
	Peptide ELISA (DELFI A)	1:1000	
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.		
<b>Specificity/Sensitivity</b>	Phospho-MAPK Substrates (PXT <sup>P</sup> ) (46G11) Rabbit mAb detects phospho-threonine in a PXT <sup>P</sup> motif. The antibody is phospho-specific, and does not react with phospho-serine- or phospho-tyrosine-containing peptides/proteins. (U.S. Patent No's.: 6,441,140; 6,982,318; 7,259,022; 7,344,714; U.S.S.N. 11,484,485; and all foreign equivalents.)		
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with synthetic phospho-MAPK/CDK substrate peptides .		
<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 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. Cell Signaling Technology has developed antibodies that bind to phospho-threonine followed by proline, motifs PXS <sup>*</sup> /T <sup>*</sup> P and/or S <sup>*</sup> PXR/K, for use in the study and discovery of new MAPK and CDK substrates (4,5).		
<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> </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>W:</b> Western Blotting <b>IP:</b> Immunoprecipitation <b>IHC-P:</b> Immunohistochemistry (Paraffin) <b>FC-FP:</b> Flow Cytometry (Fixed/Permeabilized) <b>E-P:</b> Peptide ELISA (DELFI A)		
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>All:</b> All Species Expected		
<b>Trademarks and Patents</b>	Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.		
<b>Limited Uses</b>	Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.		

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.