

#14371 Store at -20°C

## Phospho-CDK Substrate [pTPXK] (D9V5N) Rabbit mAb



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

Applications:	Reactivity:	Sensitivity:	Source/Isotype:
WB, IP	All	Endogenous	Rabbit IgG

Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	1:100
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-CDK Substrate [pTPXK] (D9V5N) Rabbit mAb recognizes endogenous levels of proteins that are phosphorylated at threonine within the context of a TPXK motif. The antibody does not cross-react with non-phosphorylated proteins or phospho-threonine in a different context.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide library containing the phospho-TPXK motif.	
Background	Cyclin-dependent kinases (CDKs) are a family of Ser/Thr kinases that regulate cell-cycle transition through their association and subsequent phosphorylation of substrate proteins in a proline-directed fashion. CDKs phosphorylate a serine or threonine residue within the (S/T)PX(R/K) consensus sequence (1-5). Cell Signaling Technology has developed antibodies to phosphorylated proline-rich motifs for broad-based discovery applications. The TPXK motif is targeted for phosphorylation by CDKs 1, 2, 4, 5, and 6 (1-5).	
Background References	<ol style="list-style-type: none"><li>1. Songyang, Z. et al. (1996) <i>Mol Cell Biol</i> 16, 6486-93.</li><li>2. Holmes, J.K. and Solomon, M.J. (1996) <i>J Biol Chem</i> 271, 25240-6.</li><li>3. Endicott, J.A. et al. (1999) <i>Curr Opin Struct Biol</i> 9, 738-44.</li><li>4. Songyang, Z. et al. (1994) <i>Curr Biol</i> 4, 973-82.</li><li>5. Kitagawa, M. et al. (1996) <i>EMBO J</i> 15, 7060-9.</li></ol>	

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	<b>WB:</b> Western Blotting <b>IP:</b> Immunoprecipitation
Cross-Reactivity Key	<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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