

#4381 Store at -20C

## Phospho-(Ser/Thr) PKD Substrate Antibody



**Cell Signaling**  
TECHNOLOGY®

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

<b>Applications:</b> WB, E-P	<b>Reactivity:</b> All	<b>Sensitivity:</b> Endogenous	<b>Source:</b> Rabbit
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### Product Usage Information

#### Application

Western Blotting  
Peptide ELISA (DELFI A)

#### Dilution

1:1000  
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-(Ser/Thr) PKD Substrates Antibody detects peptides and proteins containing a phospho-Ser/Thr residue with arginine at the -3 position and leucine at the -5 position, preferring proline at the -1 position within the motif. The antibody may cross-react with some peptides and proteins containing an arginine residue at -3 position and a hydrophobic or basic residue at the -5 position. (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.)

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phospho-PKD substrate peptide. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Protein kinase D1 (PKD1), also called PKC $\mu$ , is one member of the protein kinase D family. PKD members are serine/threonine protein kinases implicated in very diverse cellular functions including cell growth and survival, Golgi organization and immune response (1). The information about the natural substrates of PKD is limited (2,3). The enzyme recognizes and phosphorylates the following consensus sequence: LXRXXS/T. Phospho-(Ser/Thr) PKD Substrate Antibody recognizes phosphorylated PKD substrates at their consensus motif, providing a powerful new tool for PKD target discovery and characterization as well as HTS drug screening for potential kinase regulators.

### Background References

1. Rykx, A. et al. (2003) *FEBS Lett* 546, 81-6.
2. Nishikawa, K. et al. (1997) *J Biol Chem* 272, 952-60.
3. Iglesias, T. et al. (2000) *J Biol Chem* 275, 40048-56.

### 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

**WB:** Western Blotting **E-P:** Peptide ELISA (DELFI A)

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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