

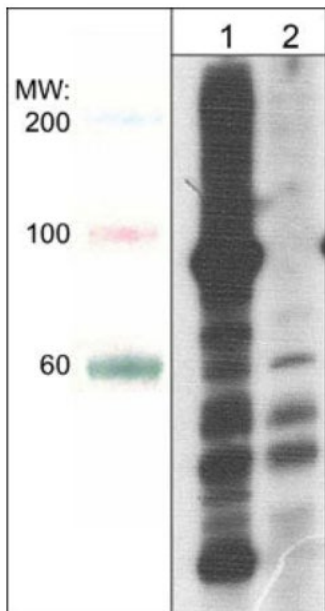
Product Datasheet

Anti-Phosphoserine/threonine Antibody

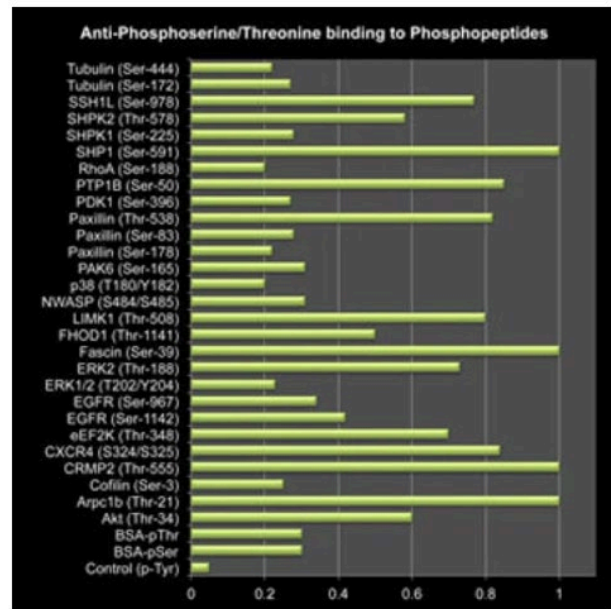
Overview

<b>Catalog #</b>	PP2551
<b>Size</b>	100 µL
<b>Host Species</b>	Rabbit Rabbit Polyclonal
<b>Format</b>	Antigen Affinity Purified
<b>Applications</b>	WB 1:1000 ICC 1:50 IP 1:100
<b>Species Tested</b>	Human, Mouse, and Rat
<b>Immunogen</b>	Anti-Phosphoserine/threonine was generated from a panel of phosphoserine and phosphothreonine-containing peptide immunogens designed from human protein sequences. All peptide sequences used are highly conserved in many species.
<b>Cite this Antibody</b>	PhosphoSolutions Cat# PP2551, RRID:AB_1184778

Images



Western blot analysis of A431 cells treated with calyculin A (100 nM) for 30 min (lane 1) then treated with lambda phosphatase (lane 2). The blot was probed with anti-Phosphoserine/threonine rabbit polyclonal at 1:1000.



Bar graph showing anti-Phosphoserine/threonine (PP2551) binding to a variety of phosphoserine and phosphothreonine peptides, but not control peptide containing unphosphorylated serine or phosphotyrosine.

## Details

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### Target Description

Phosphorylation of specific serine or threonine residues is an important post-translational modification for regulating the activity of most proteins. Stimulation of a variety of cell signaling pathways activates the receptor and non-receptor ser/thr kinases that mediate these protein modifications. Antibodies that can detect phosphoserine or phosphothreonine residues are excellent tools for characterizing changes in the post-translational state of a broad range of phosphorylated proteins. Immunoprecipitation of proteins of interest followed by detection of phosphoserine or phosphothreonine using anti-phosphoserine antibody is commonly used to correlate changes in phosphorylation state with alterations in protein activity.

### Specificity

This antibody was cross-adsorbed to unphosphorylated peptide then affinity purified using a mix of phosphoserine and phosphothreonine peptides (without carrier). The antibody detects many serine or threonine phosphorylated proteins by western blot, immunocytochemistry, and ELISA.

### Quality Control

Western blots performed on each lot.

### Buffer

PBS + 1 mg/ml BSA, 0.05% NaN<sub>3</sub> and 50% glycerol

### Storage

Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

### Stability

After date of receipt, stable for at least 1 year at -20°C.

## Significant Citations

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Herwig, M., Begovic, M., Budde, H., Delalat, S., Zhazykbayeva, S., Sieme, M., Schneider, L., Jaquet, K., Mügge, A., Akin, I. and El-Battrawy, I., 2024. Protein Kinase D Plays a Crucial Role in Maintaining Cardiac Homeostasis by Regulating Post-Translational Modifications of Myofilament Proteins. *International Journal of Molecular Sciences*, 25(5), p.2790.

Dobson, L., Barrell, W.B., Seraj, Z., Lynham, S., Wu, S.Y., Krause, M. and Liu, K.J., 2023. GSK3 and lamellipodin balance lamellipodial protrusions and focal adhesion maturation in mouse neural crest migration. *Cell Reports*, 42(9).

Yang, D., He, Y., Li, R., Huang, Z., Zhou, Y., Shi, Y., Deng, Z., Wu, J. and Gao, Y., 2023. Histone H3K79 methylation by DOT1L promotes Aurora B localization at centromeres in mitosis. *Cell Reports*, 42(8).

Zhazykbayeva, S., Hassoun, R., Herwig, M., Budde, H., Kovács, Á., Mannherz, H.G., El-Battrawy, I., Tóth, A., Schmidt, W.E., Mügge, A. and Hamdani, N., 2023. Oxidative stress and inflammation distinctly drive molecular mechanisms of diastolic dysfunction and remodeling in female and male heart failure with preserved ejection fraction rats. *Frontiers in Cardiovascular Medicine*, 10, p.1157398.

Levin, G., Yasmin, M., Liveanu, V., Burstein, C., Hanna, R., Kleifeld, O., Simanowitz, M.C., Meir, A., Tadmor, Y., Hirschberg, J. and Adir, N., 2023. A desert *Chlorella* sp. that thrives at extreme high-light intensities using a unique photoinhibition protection mechanism. *The Plant Journal*.

## Our Guarantee

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