

**#2981** Store at -20C

## Phospho-(Ser) Arg-X-Tyr/Phe-X-pSer Motif Antibody


**Cell Signaling**  
TECHNOLOGY®

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

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

#### Application

Western Blotting  
Immunoprecipitation  
Peptide ELISA (DELFI A)

#### Dilution

1:1000  
1:50  
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) Arg-X-Tyr/Phe-X-pSer Motif Antibody detects endogenous levels of proteins containing the Arg-X-Tyr/Phe-X-pSer motif. This antibody does not cross-react with nonphosphorylated serine or phospho-threonine proteins with the same motif or other phospho-serine/threonine-containing proteins and peptides without this motif.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with Arg-X-Tyr/Phe-X-pSer-containing peptides. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

The 14-3-3 proteins are a highly conserved family of proteins involved in the regulation of cell survival, apoptosis, proliferation and checkpoint control (1-5). Binding of 14-3-3 is mediated through phospho-serine-containing proteins (6). Two different phospho-serine containing motifs are found using a degenerate phospho-serine-oriented peptide library technique, RSXS\*XP and RXY/FXS\*XP (6). Motif 2 (RXY/FXS\*XP) is found in critical regulatory proteins including cdc25A, cdc25B, PKCgamma, IRS-1 and BCR (6). Although Phospho-(Ser) Arg-X-Tyr/Phe-X-pSer Motif Antibody binds 14-3-3 binding motif 2 with no requirement for proline in the +2 position, it provides a powerful tool for the discovery and characterization of potential 14-3-3 binding motif 2-containing proteins or other proteins with the RXY/FXS\* motif.

### Background References

1. Aitken, A. (1995) *Trends Biochem Sci* 20, 95-7.
2. Zha, J. et al. (1996) *Cell* 87, 619-28.
3. Piwnicka-Worms, H. (1999) *Nature* 401, 535, 537.
4. Tzivion, G. et al. (1998) *Nature* 394, 88-92.
5. Xing, H. et al. (2000) *EMBO J* 19, 349-58.
6. Yaffe, M.B. et al. (1997) *Cell* 91, 961-71.

### 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 **IP:** Immunoprecipitation **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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