

## Mouse Monoclonal Antibody to

# Phosphoserine

## clone 4A9

**Order No.:** 0020-100/PSER-4A9

**Size (µg)** 100

**Lot No.:** 0020S



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Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgM	human, mouse, rat, dog	WB, ELISA, IP	pattern			phosphoserine conjugated to KLH

### Background and Specificity:

Phosphorylation and dephosphorylation of cellular proteins are central steps in transducing extracellular signals to the cell nucleus. Phosphorylated epitopes may serve as docking sites for the assembly of protein complexes or may alter the 3-dimensional protein structure thus modulating enzymatic activity or the ability to undergo protein-protein-interactions. Modification of proteins on serine residues is mediated by serine/threonine kinases.

**Please note that phosphoserine detection by monoclonal antibodies is always dependent on the surrounding amino acid sequence!**

**Mab PSER-4A9** recognizes a broad range of serine-phosphorylated proteins in crude cell extracts, preferring positively charged amino acids directly neighboured to phosphoserine.

### Related Products

#### mab against Phosphoserine

#0018-100/pSer-1C8

#0019-100/pSer-4A3

#0021-100/pSer-4H4

#0022-100/pSer-7F12

#0023-100/pSer-16B4

#### mab against Phosphothreonine

#0024-100/pThr-1E11

#0025-100/pThr-4D11

#0026-100/pThr-14B3

<b>Purification:</b>	The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.
<b>Formulation:</b>	lyophilized from 1 ml 2 x PBS / 0.09 % Na-azide / PEG and Sucrose.
<b>Reconstitution:</b>	Reconstitute with 1 ml H <sub>2</sub> O (15 min, RT).
<b>Stability:</b>	For long-term storage, freeze lyophilizate upon arrival (-20°C). Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 1 week.

**Avoid repeated freeze / thaw cycles.**

**Positive Control:** #0901: phosphoserine/phosphothreonine positive control

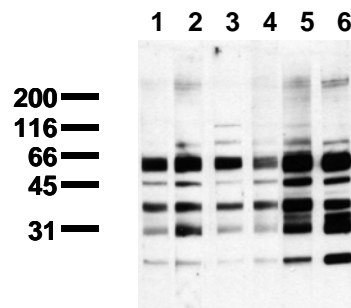
**Immunoblotting:** 1 µg/ml for HRPO/ECL detection  
**Recommended blocking buffer:** BSA/Tween 20 based blocking buffer.  
**DO NOT USE MILK OR CASEIN FOR BLOCKING!**

**Immunoprecipitation:** use at 1 - 10 µg per 10<sup>6</sup> pervanadate-treated A431 cells

**Immunocytochemistry:** ND

**ELISA:** use at 0.05 µg/ml

**All products are supplied for research and investigational use only. Not for use in humans or laboratory animals.**



#### Phosphoserine Detection

Phosphoprotein Positive Control was probed with

lane 1: mab 1C8 (IgM), 1 µg/ml

lane 2: mab 4A3 (IgM), 1 µg/ml

lane 3: mab 4A9 (IgM), 1 µg/ml

lane 4: mab 4H4 (IgM), 1 µg/ml

lane 5: mab 7F12 (IgG), 1 µg/ml

lane 6: mab 16B4 (IgM), 1 µg/ml