**Monoclonal Antibody to Phosphoserine (incl. pos. control) - Purified**

<table>
<thead>
<tr>
<th>Catalog No.:</th>
<th>AM00117PU-N</th>
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<tr>
<td>Quantity:</td>
<td>0.1 mg</td>
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<td><strong>Background:</strong> 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!</td>
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<td><strong>Host / Isotype:</strong> Mouse / IgM</td>
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<td><strong>Clone:</strong></td>
<td>16B4</td>
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<td><strong>Immunogen:</strong> Phosphopeptide conjugated to KLH.</td>
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<td><strong>Remarks:</strong> Epitope: ...pSer-Pro...;...pSer-Lys</td>
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| **Format:** State: Lyophilized purified Ig fraction  
  Purification: Size Exclusion Chromatography.  
  Buffer System: 1 ml 2x PBS containing 0.09% Sodium Azide, PEG and Sucrose  
  Reconstitution: Restore with 1.0 ml H2O (15 min, RT). |
| **Applications:** Western Blot: 1 µg/ml for HRPO/ECL detection.  
  Recommended blocking buffer: BSA/Tween 20 based blocking buffer. **DO NOT USE MILK OR CASEIN FOR BLOCKING!**  
  ELISA: 0.05 µg/ml.  
  Immunoprecipitation: 1-10 µg per 10e6 pervanadate-treated A431 cells.  
  Included Positive Control: Phosphoserine/Phosphothreonine (for details see "Protocols"). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user. |
| **Specificity:** AM00117PU-N recognizes a broad range of serine-phosphorylated proteins in crude cell extracts, preferring positively charged amino acids directly neighboured to phosphoserine. Species: Human, Mouse, Rat and Dog. Other species not tested. |
| **Storage:** Store lyophilized (preferably in a desiccator) at -20°C and reconstituted (aliquote and freeze in liquid nitrogen) at -80°C. Avoid repeated freezing and thawing. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 1 week. Shelf life: one year from despatch. |

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com
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Protocols:

Positive control: pSer / pThr Molecular Weight Marker

Formulation:
The pSer/pThr molecular weight marker contains rabbit muscle phosphoproteins isolated by Fe3+/IDA - affinity chromatography. Proteins are lyophilized from PBS/NaF/PEG/Sucrose/ Bromophenolblue and Na - azide. After reconstitution the solution contains 0.09% Na-azide.

Stability:
Reconstitute by addition of 200 µl H2O. After complete solubilization add 200 µl 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

Application:
The pSer/pThr molecular weight marker is recommended for immunoblot applications. Use 20µl molecular weight marker per lane. Note: Use BSA based blot incubation buffers. Milk, Casein and Blotto might interfere with antibody - antigen interaction.

Storage:
Aliquote and store frozen.
Avoid repeated freeze/thaw cycles.
Shelf life: one year from despatch.

Pictures:

Figure 1. 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

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