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

Catalog No.: AM00113PU-N
Quantity: 0.1 mg
Background: 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.

Host / Isotype: Mouse / IgM
Clone: 4A3
Immunogen: Synthetic phosphopeptide conjugated to KLH.

Format: State: Lyophilized purified Ig fraction.
Purification: Subsequent Thiophilic Adsorption and Size Exclusion Chromatography.
Buffer System: 1 ml 2 x PBS containing 0.09% Sodium Azide, PEG and Sucrose.
Reconstitution: Restore with 1.0 ml H2O (15 min, RT).

Applications: ELISA: Use at 0.05 µg/ml. Immunoprecipitation: Use at 1-10 µg per 10e6 pervanadate-treated A431 cells. Western Blot (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!
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody recognizes a broad range of serine-phosphorylated proteins in crude cell extracts, preferring positively charged amino acids directly neighboured to phosphoserine. Please note that phosphoserine detection by monoclonal antibodies is always dependent on the surrounding amino acid sequence!
Species: Human, Mouse, Rat and Dog.
Other species not tested.

Add. Information: This product contains a Positive Control (for details see "Protocols").
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 2-8°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
Protocols:

Positive Control: pSer / pThr Molecular Weight Marker

Formulation
The pSer/pThr molecular weight marker contains rabbit muscle phosphoproteins isolated by Fe⁺/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.

Application
The pSer/pThr molecular weight marker is recommended for immunoblot applications.
Use 20 µl 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 freezing and thawing.
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