

## Product datasheet for **AM00113PU-N**

### Phosphoserine (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 4A3]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	4A3
Applications:	ELISA, IP, WB
Recommended Dilution:	<b>ELISA:</b> Use at 0.05 µg/ml. <b>Immunoprecipitation:</b> Use at 1-10 µg per 10e6 pervanadate-treated A431 cells. <b>Western Blot (Immunoblotting):</b> 1 µg/ml for HRPO/ECL detection. Recommended blocking buffer: BSA/Tween 20 based blocking buffer. <b>DO NOT USE MILK OR CASEIN FOR BLOCKING!</b>
Reactivity:	Canine, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgM
Clonality:	Monoclonal
Immunogen:	Synthetic phosphopeptide conjugated to KLH.
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!
Formulation:	1 ml 2 x PBS containing 0.09% Sodium Azide, PEG and Sucrose. State: Purified State: Lyophilized purified Ig fraction.
Reconstitution Method:	Restore with 1.0 ml H <sub>2</sub> O (15 min, RT).
Purification:	Subsequent Thiophilic Adsorption and Size Exclusion Chromatography.
Conjugation:	Unconjugated
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.
Stability:	Shelf life: one year from despatch.



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**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.

**Note:** This product contains a Positive Control (for details see "**Protocols**").

**Protocol: 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 H<sub>2</sub>O. 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.

**Product images:**

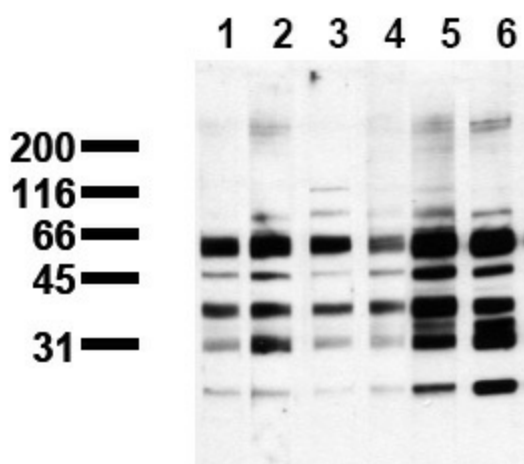


Figure 1. Phosphoserine Detection:

Phosphoprotein Positive Control was probed with lane 1: mab 1C8 (IgM), 1 g/ml lane 2: mab 4A3 (IgM), 1 g/ml lane 3: mab 4A9 (IgM), 1 g/ml lane 4: mab 4H4 (IgM), 1 g/ml lane 5: mab 7F12 (IgG), 1 g/ml lane 6: mab 16B4 (IgM)