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Product datasheet for AM00118PU-N

Phosphoserine 6x sampler kit (incl. pos. control) Mouse Monoclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IP, WB
Reactivity:	Canine, Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Specificity:	The clones recognize 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! **Do Not Use Milk or Casein based blocking and Incubation Buffers**
Formulation:	State: Purified
Conjugation:	Unconjugated
Background:	Phosphorylation and dephosphorylation of cellular proteins are central steps in transducing extracellular signals to the nucleus. Phosphorylated epitopes may serve as docking sites for the assembley 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 tyrosine residues is mediated by protein tyrosin kinases. Tyrosine phosphorylation may alter the biological activity or mediate the assembly of protein complexes via the interaction of phosphotyrosine residues with SH2 or PTB domains. Antibodies direct against phosphorylated epitopes recognize the phosphorylated amino acid in the context of the surrounding amino acid sequence. Recognition is therefore dependent on 2 criteria: 1) phosphorylation and 2) the surrounding amino acid motif. If one of the two criteria is not fulfilled, the antibody will not detect the phosphorylation site. Since the amino acid sequence varies between different phosphorylation sites, certain proteins - though phosphorylated - may not be detected by the antibody. Phosphorylation patterns in a given cell extract may differ when probed with different antibodies due to sequence specificity.

Note:

The Phosphoserine Detection Kit contains 6 different Phosphoserine specific monoclonal antibodies:

Cat.-No AM00112PU-25 (Clone 1C8).
Cat.-No AM00113PU-25 (Clone 4A3).
Cat.-No AM00114PU-25 (Clone 4A9).
Cat.-No AM00115PU-25 (Clone 4H4).
Cat.-No AM00116PU-25 (Clone 7F12).
Cat.-No AM00117PU-25 (Clone 16B4).

This product contains a *Positive Control* for Immunoblot Applications (for details see "Protocols")

Protocol: ***Included Positive Control:*** **pSer / pThr Molecular Weight Marker**
Formulation:
The pSer/pThr molecular weight marker contains rabbit muscle phosphoproteins isolated by Fe^{3+}/IDA - affinity chromatography. Proteins are lyophilized from PBS/NaF/PEG/Sucrose/ Bromophenolblue and Na - Azide. After reconstitution the solution contains 0.09% Sodium Azide.
Stability:
Reconstitute by addition of 200 µl H_2O. 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.

Product images:

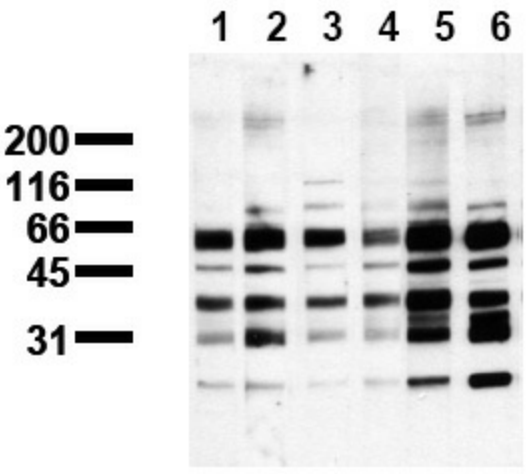

Figure 1. Phosphoserine Detection. Phosphoprotein Positive Control was probed with: Lane 1: mab 1C8 (IgM), 1 g/ml Lane 2: mab 4A3 (IgM), 1 g/ml Lane 3: mab 4A9 (IgM), 1 g/ml Lane 4: mab 4H4 (IgM), 1 g/ml Lane 5: mab 7F12 (IgG), 1 g/ml Lane 6: mab 16B4 (IgM