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Phosphoserine Antibody
Catalog # ASM10402

Specification

Phosphoserine Antibody - Product Information

Application	**WB, IHC, IP, ICC**
Host	**Rabbit**
Reactivity	**Species Independent**
Clonality	**Polyclonal**

Description
Rabbit Anti-Phosphoserine Polyclonal

Target/Specificity
Detects proteins phosphorylated on serine residues. Does not cross-react with phosphotyrosine.

Other Names
Phospho-ser Antibody, pS Antibody, pSer Antibody, Phospho-serine antibody

Immunogen
Phosphoserine conjugated to KLH, and phosvitin mixture

Purification
Protein A Purified

Storage	**-20ºC**

Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
2 µg/ml of SPC-149 was sufficient for detection of phosphorylation signal in western blot analysis using human MMRU cells treated with 0.1 µM okadaic acid.

Phosphoserine Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phosphoserine Antibody - Images

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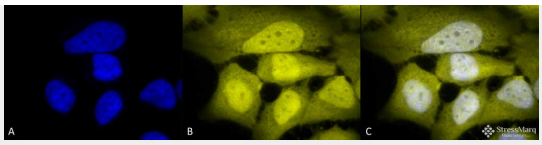
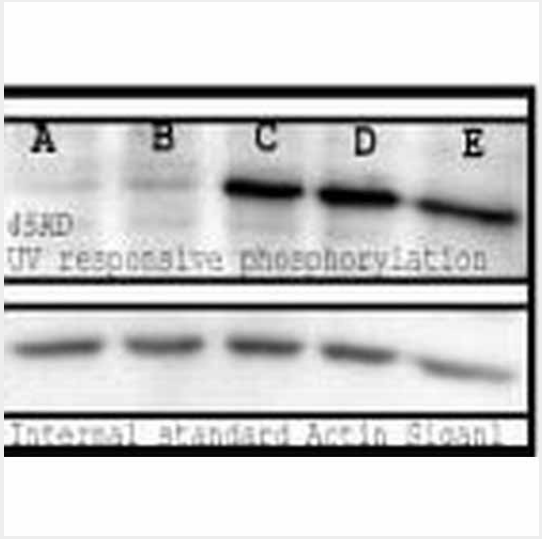


Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Phosphoserine Polyclonal Antibody (ASM10402). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Phosphoserine Polyclonal Antibody (ASM10402) at 1:50 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Nucleus. Magnification: 100x.



Western blot analysis of Mouse Spleen lysates showing detection of Phosphoserine protein using Rabbit Anti-Phosphoserine Polyclonal Antibody (ASM10402). Primary Antibody: Rabbit Anti-Phosphoserine Polyclonal Antibody (ASM10402) at 1:1000. Bands are responsive to treatment with varying long UV wavelengths: A(0), B(50), C(200), D(400), and E (treated with 0.1 µM okadaic acid).

Phosphoserine Antibody - Background

Protein phosphorylation is an important posttranslational modification that serves many key functions to regulate a protein's activity, localization, and protein-protein interactions. Phosphorylation is catalyzed by various specific protein kinases, which involves removing a phosphate group from ATP and covalently attaching it to to a recipient protein that acts as a substrate. Most kinases act on both serine and threonine; others act on tyrosine, and a number (dual specificity kinases) act on all three. Because phosphorylation can occur at multiple sites on any given protein, it can therefore change the function or localization of that protein at any time (1). Changing the function of these proteins has been linked to a number of diseases, including cancer, diabetes, heart disease, inflammation and neurological disorders (2-4).

Phosphoserine Antibody - References

1. Goto H. et al. (2005) Nature Cell Biology 8: 180-187.
2. Blume-Jensen P. and Hunter T. (2001) Nature 411: 355-365.
3. Downward J. (2001) Nature 411: 759-762.
4. Pawson T. and Saxton T.M. (1999) Cell 97: 675-678.
5. Ostrovsky P.C. (1995) Genes Dev. 9(16): 2034-2041.