10320 Camino Santa Fe, Suite G
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Acetylated Lysine Antibody
Catalog # ASM10406

Specification

Acetylated Lysine Antibody - Product Information

Application	**ICC/IF, WB**
Host	**Rabbit**
Reactivity	**Species Independent**
Clonality	**Polyclonal**

Description
Rabbit Anti-Acetylated Lysine Polyclonal

Target/Specificity
Detects proteins containing acetylated lysine residues. No reaction to non-acetylated proteins.

Other Names
lysine Antibody, acetyl lysine Antibody

Immunogen
Acetylated KLH Conjugated

Purification
Protein A Purified

Storage	**-20ºC**

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

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
A 1/250 dilution of SPC-155 was sufficient to detect the acetylated histone from TSA treated mouse spleen cell in western blot analysis.

Acetylated Lysine 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

Acetylated Lysine Antibody - Images

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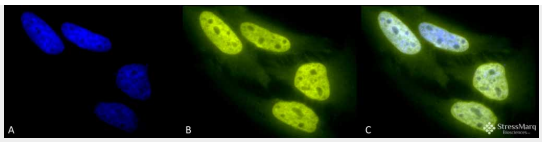
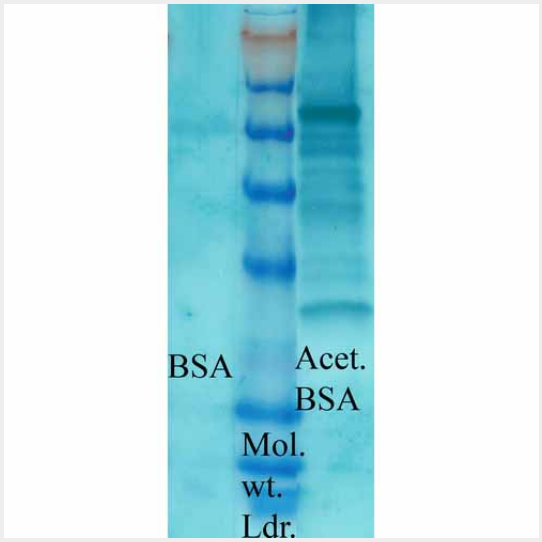
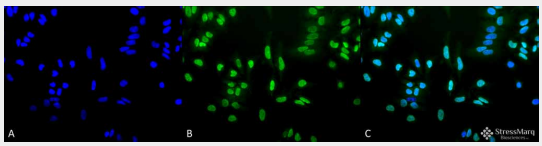


Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Acetylated Lysine Polyclonal Antibody (ASM10406). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Acetylated Lysine Polyclonal Antibody (ASM10406) at 1:100 for 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: Nucleus. Cytoplasm. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-Acetylated Lysine Antibody. (C) Composite. Heat Shocked at 42°C for 1h.



Western blot analysis of Bovine serum albumin showing detection of Acetylated Lysine protein using Rabbit Anti-Acetylated Lysine Polyclonal Antibody (ASM10406). Primary Antibody: Rabbit Anti-Acetylated Lysine Polyclonal Antibody (ASM10406) at 1:1000. Acetylated lysine in BSA (Left) and Acetylated BSA (Right).



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Acetylated Lysine Polyclonal Antibody (ASM10406). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Acetylated Lysine Polyclonal Antibody (ASM10406) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Nucleus. Cytoplasm. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-Acetylated Lysine Antibody. (C) Composite. Heat Shocked at 42°C for 1h.

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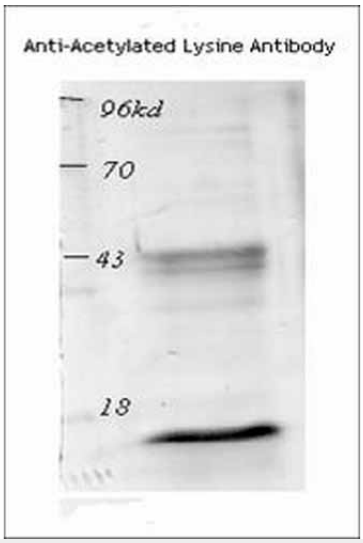

Western blot analysis of Mouse Spleen lysates showing detection of Acetylated Lysine protein using Rabbit Anti-Acetylated Lysine Polyclonal Antibody (ASM10406). Primary Antibody: Rabbit Anti-Acetylated Lysine Polyclonal Antibody (ASM10406) at 1:1000.

Acetylated Lysine Antibody - Background

Post-translational modifications of proteins play critical roles in the regulation and function of many known biological processes. Proteins can be post-translationally modified in many different ways, and a common post-transcriptional modification of Lysine involves acetylation (1). The conserved amino-terminal domains of the four core histones (H2A, H2B, H3 and H4) contain lysines that are acetylated by histone acetyltransferases (HATs) and deacetylated by histone deacetylases (HDACs) (2). Protein posttranslational reversible lysine Nε-acetylation and deacetylation have been recognized as an emerging intracellular signaling mechanism that plays critical roles in regulating gene transcription, cell-cycle progression, apoptosis, DNA repair, and cytoskeletal organization (3). The regulation of protein acetylation status is impaired in the pathologies of cancer and polyglutamine diseases (4), and HDACs have become promising targets for anti-cancer drugs currently in development (5).

Acetylated Lysine Antibody - References

1. Yang X.J. (2005) Oncogene. 24:1653-1662.
2. Hassig C.A. and Schreiber S.L. (1997) Curr. Opin. Chem. Biol. 1(3): 300-308.
3. Yang X.J. (2004) Bioessays 26:1076-1087.
4. Hughes R.E. (2002) Curr. Biol. 12: R141-R143.
5. Vigushin D.M. and Coombes R.C. (2004) Curr. Cancer Drug Targets 4: 205-218.
6. Chan H.M. et al. (2001) Nat. Cell Biol. 3: 667-674.
7. Martinez-Balbas M.A. et al. (2000) EMBO J. 19: 662-671.