10320 Camino Santa Fe, Suite G
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Methylated Lysine Antibody
Catalog # ASM10409

Specification

Methylated Lysine Antibody - Product Information

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

Description
Rabbit Anti-Methylated Lysine Polyclonal

Target/Specificity
Detects proteins containing methylated lysine residues.

Other Names
Dimethylysine Antibody, Methyl lysine Antibody, N epsilon dimethyl lysine Antibody, Trimethyl lysine Antibody

Immunogen
Methylated KLH Conjugated

Purification
Protein A Purified

Storage	**-20ºC**

Storage Buffer
PBS, 50% glycerol

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
0.2-0.5 µg/ml of SPC-158 was sufficient for detection of the methylated histone by western blot analysis using melanoma cells in TBSt.

Methylated 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

Methylated Lysine Antibody - Images

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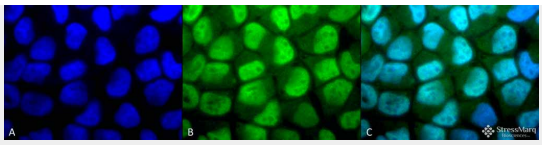
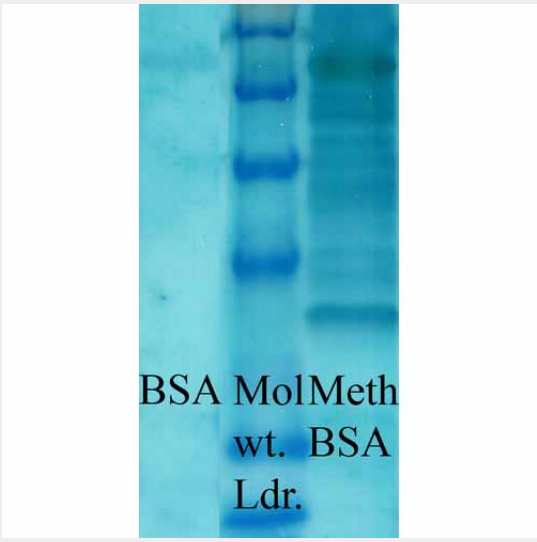


Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Methylated Lysine Polyclonal Antibody (ASM10409). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Methylated Lysine Polyclonal Antibody (ASM10409) at 1:50 for 12 hours at 4°C. 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: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-Methylated Lysine Antibody. (C) Composite.



Western blot analysis of Bovine serum albumin showing detection of Methylated Lysine protein using Rabbit Anti-Methylated Lysine Polyclonal Antibody (ASM10409). Primary Antibody: Rabbit Anti-Methylated Lysine Polyclonal Antibody (ASM10409) at 1:1000. Methylated Lysine in BSA (Left) and Methylated BSA (Right).

Methylated 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).

Methylated 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.

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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.