Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Pan DiMethyl-lysine Rabbit pAb

Catalog No.: A5870 **1 Publications**

Basic Information

Observed MW
15-60kDa

Calculated MW

Category
Primary antibody

Applications
WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity
Human, Mouse, Rat, Other (Wide Range Predicted)

Background

Methylation is a major post-translational modification (PTM) generated by methyltransferase on target proteins, protein methylation plays important regulatory roles in gene expression, protein activity and stability, and signal transduction. Methylation can occur on specific lysine or arginine residues localized within regulatory domains in both histone and nonhistone proteins, thereby allowing distinguished properties of the targeted protein. Lysine can be methylated to different degrees, including mono-, di-, or trimethylation, which reflects its functional diversity and regulatory complexity compared to other PTMs. Lys9 of histone H3 is mono- or di-methylated by G9A/GLP and tri-methylated by SETDB1 to activate transcription. Tumor suppressor p53 is regulated by methylation of at least four sites. p53-mediated transcription is repressed following mono-methylation of p53 at Lys370 by SMYD2; Di-methylation at the same residue further inhibits p53 by preventing association with 53BP1. Concomitant di-methylation at Lys382 inhibits p53 ubiquitination following DNA damage. Di-methylation at Lys373 by G9A/GLP inhibits p53-mediated apoptosis and correlates with tri-methylation of histone H3 Lys9 at the p21 promoter.

Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:100
IF/ICC	1:50 - 1:100
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID **Swiss Prot**

Immunogen
Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Product Information

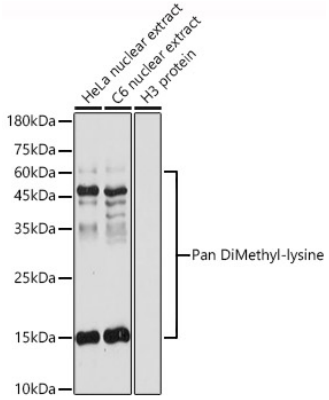
Source
Rabbit

Isotype
IgG

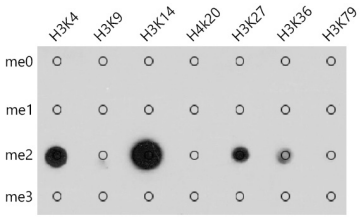
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

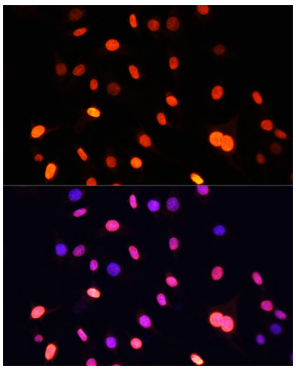
Validation Data



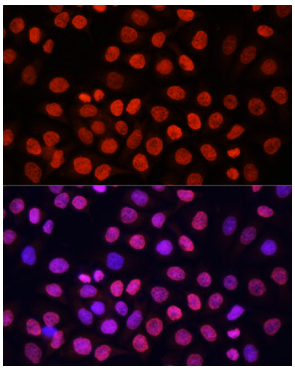
Western blot analysis of various lysates using Pan DiMethyl-lysine Rabbit pAb (A5870) at 1:500 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



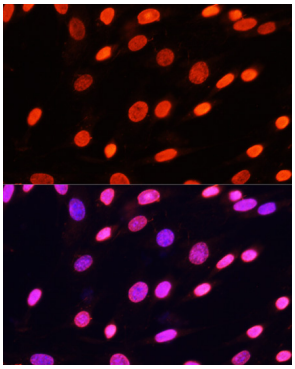
Dot-blot analysis of all sorts of methylation peptides using Pan DiMethyl-lysine antibody (A5870) at 1:1000 dilution.



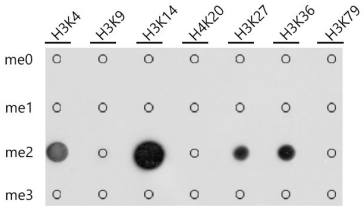
Immunofluorescence analysis of C6 cells using Pan DiMethyl-lysine Rabbit pAb (A5870) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using Pan DiMethyl-lysine Rabbit pAb (A5870) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using Pan DiMethyl-lysine Rabbit pAb (A5870) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Dot-blot analysis of H3K4me0, H3K4me1, H3K4me2, H3K4me3, H3K9me0, H3K9me1, H3K9me2, H3K9me3, H3K14me0, H3K14me1, H3K14me2, H3K14me3, H3K20me0, H3K20me1, H3K20me2, H3K20me3, H3K27me0, H3K27me1, H3K27me2, H3K27me3, H3K36me0, H3K36me1, H3K36me2, H3K36me3, H3K79me0, H3K79me1, H3K79me2, H3K79me3 using Pan DiMethyl-lysine Rabbit pAb.