Histone H3K23me1 antibody (pAb)

Catalog Nos: 39387, 39388
RRID: AB_2793238
Isotype: Serum
Application(s): DB, ICC, IF, WB
Reactivity: Human, Wide Range Predicted

Volumes: 200 µl, 10 µl
Purification: None
Host: Rabbit
Molecular Weight: 17 kDa

Background: Histone H3 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). Chromatin is subject to a variety of chemical modifications, including post-translational modifications of the histone proteins and the methylation of cytosine residues in the DNA. Reported histone modifications include acetylation, methylation, phosphorylation, ubiquitylation, glycosylation, ADP-ribosylation, carbonylation and SUMOylation; these modifications play a major role in regulating gene expression.

The methylation of histones can occur on two different residues: arginine or lysine. Histone methylation can be associated with transcriptional activation or repression, depending on the methylated residue.

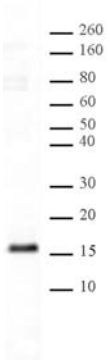
Immunogen: This Histone H3 monomethyl Lys23 antibody was raised against a peptide containing monomethyl Lys23 of human histone H3.

Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

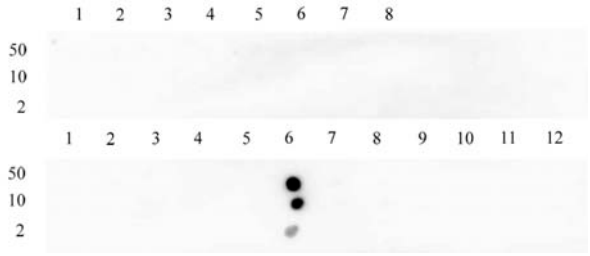
Application Notes:
Applications Validated by Active Motif:
WB: 1:1,000 - 1:5,000 dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Histone H3 monomethyl Lys23 pAb tested by Western blot.
HeLa cell nuclear extract (20 µg per lane) was probed with Histone H3 monomethyl Lys23 pAb at a dilution of 1:1,000.



Histone H3 monomethyl Lys23 pAb tested by dot blot analysis.
Dot blot analysis was used to confirm the specificity of Histone H3 monomethyl Lys23 pAb for monomethyl Lys23 histone H3. Methylated peptides corresponding to the immunogen and related sequences derived from histone H3 were spotted onto PVDF and probed with the antibody at 1:5,000. The amount of peptide (picomoles) spotted is indicated next to each row.
Top row: Lane 1: Unmod H3 aa 1-10 peptide. Lane 2: Monomethyl lysine 4. Lane 3: Dimethyl lysine 4. Lane 4: Trimethyl lysine 4. Lane 5: Unmodified H3 aa 6-22 peptide. Lane 6: Monomethyl lysine 9. Lane 7: Dimethyl lysine 9. Lane 8: Trimethyl lysine 9.
Bottom row: Lane 1: Dimethyl lysine 14. Lane 2: Monomethyl lysine 18. Lane 3: Dimethyl lysine 18. Lane 4: Trimethyl lysine 18. Lane 5: Unmod H3 aa 18-27 peptide. Lane 6: Monomethyl lysine 23. Lane 7: Dimethyl lysine 23. Lane 8: Trimethyl lysine 23. Lane 9: Unmod H3 aa 22-32 peptide. Lane 10: Monomethyl lysine 27. Lane 11: Dimethyl lysine 27. Lane 12: Trimethyl lysine