

Histone H4R3me2s (symmetric) antibody (pAb)

Catalog Nos: 61187, 61988, 61188

RRID: AB_2793544

Isotype: IgG

Application(s): ChIP, ChIP-Seq, DB, WB

Reactivity: Human, Wide Range Predicted

Volumes: 100 μ l, 50 μ l, 10 μ l

Purification: Affinity Purified

Host: Rabbit

Molecular Weight: 10 kDa

Background: Histone H4 is one of the core components of the nucleosome, the basic building block of chromatin. Histones are 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.

Symmetric dimethylation of histone H4 at arginine 3 (Arg3), catalyzed by the PRMT methyltransferases, is associated with transcriptional repression. Histone H4 dimethyl Arg3 symmetric methylation (H4R2me2s) is catalyzed by PRMT5 and PRMT7.

Immunogen: This Histone H4 dimethyl Arg3 (H3R3me2s) antibody was raised against a peptide containing dimethyl Arg3 (symmetric) of human Histone H4.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

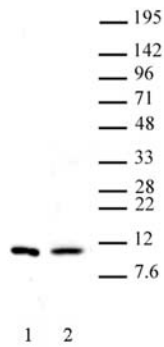
WB*: 1:500 - 1:2,000 dilution

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

References: Histone H4R3me2s (symmetric) antibody has been cited in one or more publications. To see an up-to-date listing of papers that describe its use, please go to www.activemotif.com/catalog/details/61187.

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 H4 dimethyl Arg3 symmetric pAb tested by Western blot.

Western blot performed using Histone H4 dimethyl Arg3 symmetric pAb at a dilution of 1:2,000.
Lane 1: Nuclear extract from Raji cells (20 µg). Lane 2: Nuclear extract from HeLa cells (20 µg).

Histone H4 dimethyl Arg3 symmetric pAb tested by dot blot analysis.

Dot blot analysis was used to confirm the specificity of Histone H4 dimethyl Arg3 symmetric pAb for dimethyl-arginine 3 of histone H4. Peptides corresponding to the immunogen and related peptides were spotted onto PVDF and probed with Histone H4 dimethyl Arg3 symmetric pAb at 1:2,000. The amount of peptide (picomoles) spotted is indicated next to each row.

Lane 1: unmodified Arg3. Lane 2: dimethyl-Arg3 H4 (symmetric). Lane 3: dimethyl-Arg3 H4 (asymmetric). Lane 4: monomethyl-Arg3 H4. Lane 5: unmodified Arg26 H3. Lane 6: monomethyl-Arg26 H3. Lane 7: dimethyl-Arg26 H3 (asymmetric). Lane 8: dimethyl-Arg26 H3 (symmetric). Lane 9: dimethyl-Arg2 H3 (asymmetric). Lane 10: dimethyl-Arg2 (symmetric). Lane 11: dimethyl-Arg8 H3 (asymmetric). Lane 12: dimethyl-Arg8 H3 (symmetric). Lane 13: dimethyl-Arg17 (asymmetric). Lane 14: dimethyl-Arg17 H3 (symmetric).

