Histone H4K20me2 antibody (mAb)

Catalog Nos: 39539, 39540

RRID: AB_2793248
Isotype: IgG
Application(s): WB
Reactivity: Human, Wide Range Predicted

Volumes: 100 µl, 10 µl
Purification: Culture Supernatant
Host: Mouse
Molecular Weight: 8 kDa

Background: Histone H4 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). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points; it is responsible for establishing higher-order chromatin structure. 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; they play a major role in regulating gene expression.

Histone 4 lysine 20 (H4K20) can be mono-, di- or trimethylated by different histone methyltransferases such as NSD1 or ASH1. The methylation of this lysine is often associated with transcriptional repression.

Immunogen: This Histone H4 dimethyl Lys20 antibody was raised against a peptide including dimethyl-Lys20 of human histone H4.

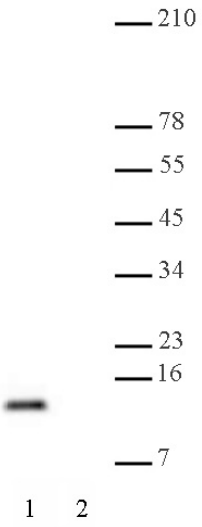
Buffer: Concentrated culture supernatant containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

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.

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 Lys20 mAb tested by Western blot.
Detection of dimethylated Histone H4 by Western blot. The analysis was performed using HeLa acid extract (10 µg, lane 1) and recombinant histone H4 protein (200 ng, lane 2) probed with Histone H4 dimethyl Lys20 mAb at a 1:2,000 dilution.