

H4K20me1 Monoclonal Antibody (5E10-D8), ChIP-Verified

Product Details	
Size	100 µL
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	5E10-D8
Conjugate	Unconjugated
Immunogen	Synthetic peptide within Human Histone H4 (mono methyl K20)(Immunogen sequence: 15-AKRHR (Kme)VLRDN-25 (branched))
Form	Liquid
Concentration	1 mg/mL
Purification	Protein G
Storage buffer	PBS
Contains	0.1% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2539450

Applications	Tested Dilution	Publications
Western Blot (WB)	1 µg/mL	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	Assay-dependent	-
Immunocytochemistry (ICC/IF)	Assay-dependent	-
Flow Cytometry (Flow)	Assay-dependent	-
ELISA (ELISA)	Assay-dependent	-
ChIP assay (ChIP)	1-5 µg	1 Publication
Dot blot (DB)	Assay-dependent	-

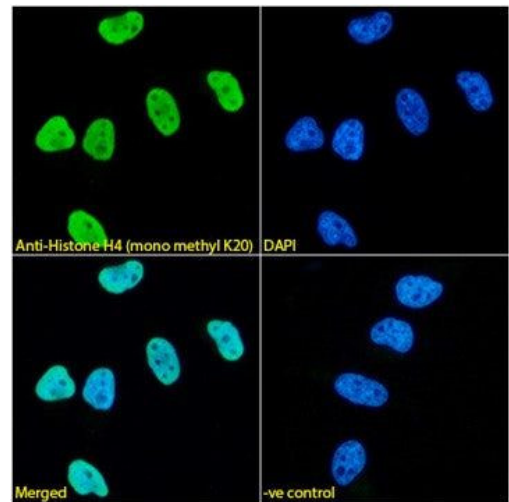
Product Specific Information

This antibody is specific for K20 mono-methylated histone H4 and does not cross-react with histone 3 or tri-, di-, or unmethylated histone H4. This antibody is predicted to react with *Xenopus laevis*, *Arabidopsis thaliana*, Fruit fly (*Drosophila melanogaster*), and most mammals based on sequence homology.

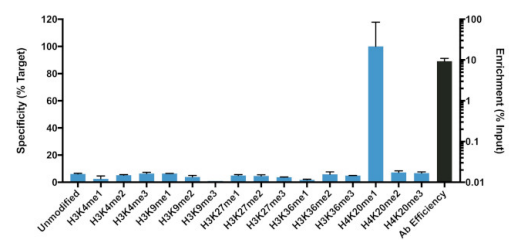
This target has a predicted molecular weight of 11 kDa. Actual Western blot results show a band at 13 kDa. This can be blocked using mono-methyl K20 Histone H4 peptide.

[Click here for Master Lot linking information.](#)

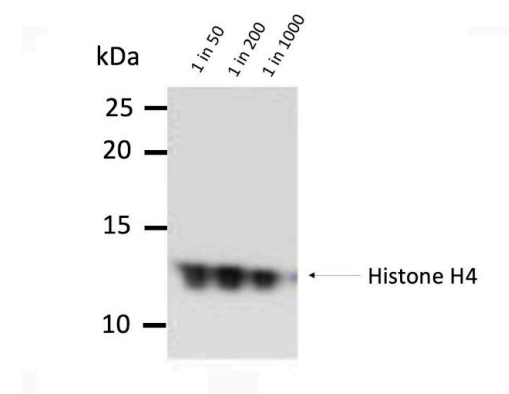
Product Images For H4K20me1 Monoclonal Antibody (5E10-D8), ChIP-Verified



H4K20me1 Antibody (MA5-18067) in ICC/IF
Immunocytochemistry analysis of H4K20me1 in paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Samples were incubated with H4K20me1 monoclonal antibody (Product # MA5-18067) using a dilution of 1:100 for 1hr. Followed by Alexa Fluor® 488 secondary antibody at a 1:1,000 dilution, showing nuclear staining. The nuclear stain is DAPI (blue). Negative control: Mouse IgG1 negative control followed by Alexa Fluor® 488 secondary antibody.



H4K20me1 Antibody (MA5-18067)
Antibody specificity was demonstrated by detection of enrichment of the targeted histone modification using SNAP-ChIP™ Spike-in, a proprietary technology developed by [EpiCypher™](https://www.epicypher.com). SNAP-ChIP™ spike-in was performed using H4K20me1 Monoclonal Antibody (Product # MA5-18067) and H4K20me1 was enriched compared to the other histone modifications in the SNAP-ChIP™ K-MetStat Panel (Product # A47356). {SNAP-ChIP}



H4K20me1 Antibody (MA5-18067) in WB
Western blot analysis of H4K20me1 in HeLa histones. Samples were separated by 15% SDS-PAGE and blotted onto a nitrocellulose membrane. The membrane was blocked in 3% NFDM in PBS-T for 1h at RT and incubated at 4 °C overnight with H4K20me1 monoclonal antibody (Product # MA5-18067) at the indicated dilutions in 0.5% NFDM/PBS-T. After incubation with mouse Fc-HRP coupled with secondary antibody for 1h at RT, ECL was performed with the Western Lightning reagents. Shown is a 3-minute exposure.

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Western Blot (1)

Communications biology	Year 2022
Poly ADP-ribosylation of SET8 leads to aberrant H4K20 methylation in mammalian nuclear genome.	Species Human
"MA5-18067 was used in Western Blotting to conclude that SET8 mediated chromatin remodeling in mammalian cells are modulated by poly ADP-ribosylation by PARP1."	
Authors: Estève PO,Sen S,Vishnu US,Ruse C,Chin HG,Pradhan S	

ChIP assay (1)

Communications biology	Year 2022
Poly ADP-ribosylation of SET8 leads to aberrant H4K20 methylation in mammalian nuclear genome.	Species Human
"MA5-18067 was used in Western Blotting to conclude that SET8 mediated chromatin remodeling in mammalian cells are modulated by poly ADP-ribosylation by PARP1."	
Authors: Estève PO,Sen S,Vishnu US,Ruse C,Chin HG,Pradhan S	

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