

Datasheet for ABIN2668470

**anti-Histone 3 antibody (H3K9me3)****5** Images**33** Publications[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	Histone 3 (H3)
Binding Specificity:	H3K9me3
Reactivity:	Human, Schizosaccharomyces pombe
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Immunocytochemistry (ICC), Dot Blot (DB), ChIP DNA-Sequencing (ChIP-seq)

## Product Details

Immunogen:	This Histone H3 trimethylLys9 antibody was raised against a peptide including trimethyllysine 9 of histone H3.
Purification:	None

## Target Details

Target:	Histone 3 (H3)
Alternative Name:	Histone H3 ( <a href="#">H3 Products</a> )
Molecular Weight:	17 kDa
Gene ID:	3020

## Application Details

Application Notes:	Recommended antibody dilutions for different applications: ChIP: 2 - 10 µl per ChIP ChIP-Seq: 10 µl each ICC/IF: 1:500 - 1:1,000 dilution WB: 1:1,000 - 1:5,000 dilution CUT&Tag: 1:50 dilution (1 µl per 50 µl reaction) Optimal working dilution should be determined by the investigator.
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Restrictions:	For Research Use only
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## Handling

Format:	Liquid
Buffer:	Rabbit serum containing 30 % glycerol and 0.035 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze/thaw cycles and keep on ice when not in storage.
Storage:	-20 °C
Storage Comment:	Antibodies in solution can be stored at -20 °C for 2 years.
Expiry Date:	6 months

## Publications

Product cited in:	Egan, Yuan, Craske, Labhart, Guler, Arnott, Maile, Busby, Henry, Kelly, Tindell, Jhunjunwala, Zhao, Hatton, Bryant, Classon, Trojer: "An Alternative Approach to ChIP-Seq Normalization Enables Detection of Genome-Wide Changes in Histone H3 Lysine 27 Trimethylation upon EZH2 Inhibition." in: <b>PLoS ONE</b> , Vol. 11, Issue 11, pp. e0166438, (2016) ( <a href="#">PubMed</a> ).  Thompson, Dulberg, Moon, Foster, Chen, Karimi, Lorincz: "hnRNP K coordinates transcriptional silencing by SETDB1 in embryonic stem cells." in: <b>PLoS genetics</b> , Vol. 11, Issue 1, pp. e1004933, (2015) ( <a href="#">PubMed</a> ).  Postberg, Kanders, Forcob, Willems, Orth, Hensel, Weil, Wirth, Jenke: "CpG signalling, H2A.Z/H3 acetylation and microRNA-mediated deferred self-attenuation orchestrate foetal NOS3
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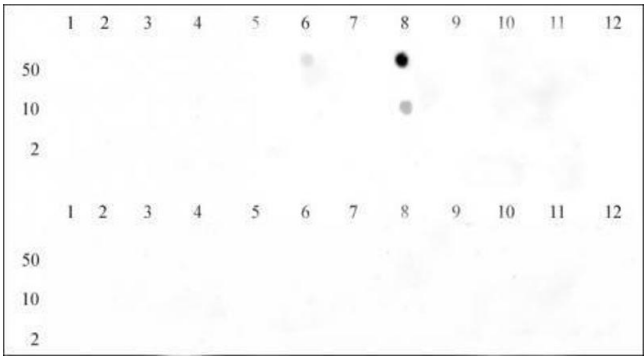
expression." in: **Clinical epigenetics**, Vol. 7, Issue 1, pp. 9, (2015) ([PubMed](#)).

Cabrera, Olcese, Horabin: "A balancing act: heterochromatin protein 1a and the Polycomb group coordinate their levels to silence chromatin in Drosophila." in: **Epigenetics & chromatin**, Vol. 8, pp. 17, (2015) ([PubMed](#)).

Soyer, Möller, Schotanus, Connolly, Galazka, Freitag, Stukenbrock: "Chromatin analyses of Zymoseptoria tritici: Methods for chromatin immunoprecipitation followed by high-throughput sequencing (ChIP-seq)." in: **Fungal genetics and biology : FG & B**, Vol. 79, pp. 63-70, (2015) ([PubMed](#)).

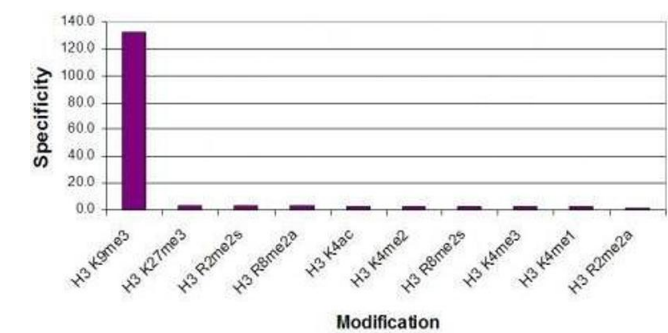
There are more publications referencing this product on: [Product page](#)

Images



Dot Blot

**Image 1.** Dot blot of Histone H3 trimethyl Lys9 antibody. Dot blot analysis was used to confirm the specificity of H3K9me3 antibody for trimethyl Lys9 of histone H3. Recombinant methylated peptides corresponding to the immunogen and related sequences were spotted onto PVDF and probed with H3K9me3 at 2 µg/ml. The amount of protein (picomoles) spotted is indicated next to each row. Top panel - Lane 1: unmodified H3K4. Lane 2: H3K4me1. Lane 3: H3K4me2. Lane 4: H3K4me3. Lane 5: unmodified H3K9. Lane 6: H3K9me1. Lane 7: H3K9me2. Lane 8: H3K9me3. Lane 9: unmodified H3K79. Lane 10: H3K79me1. Lane 11: H3K79me2. Lane 12: H3K79me3. Bottom panel - Lane 1: unmodified H3K23. Lane 2: H3K23me1. Lane 3: H3K23me3. Lane 4: H3K23me3. Lane 5: unmodified H3K27. Lane 6: H3K27me1. Lane 7: H3K27me2. Lane 8: H3K27me3. Lane 9: unmodified H3K36. Lane 10: H3K36me1. Lane 11: H3K36me2. Lane 12: H3K36me3.



### Protein Array

**Image 2.** Histone H3 trimethyl Lys9 antibody specificity tested by peptide array analysis. Peptide array analysis was used to confirm the specificity of this antibody for its intended modification. Histone H3 trimethyl Lys9 antibody was applied at a dilution of 1:2,000 to Active Motif's MODified™ Histone Peptide Array (Catalog No. 13001). The arrays were scanned with ArrayAnalysis Software 7 and the results plotted. Specificity data is shown for the most reactive peptides.

### ChIP DNA-Sequencing

**Image 3.** Histone H3 trimethyl Lys9 antibody tested by ChIP-chip. ChIP was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with chromatin from 3 million human colorectal adenocarcinoma cells. ChIP DNA was amplified by WGA, labeled and hybridized to a human tiling array. H3K9me3 binds broadly across the genome. The image shows two different regions. The left box shows many binding sites across a 7.8 Mb region on chromosome 10. The right box is zoomed in to show a dispersed binding pattern across the RHOT1 gene.



Please check the [product details page](#) for more images. Overall 5 images are available for ABIN2668470.