

Datasheet for ABIN6971918

**anti-Histone 3 antibody (3meLys27)**

5 Images

1 Publication

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## Overview

Quantity:	100 µg
Target:	Histone 3 (H3)
Binding Specificity:	3meLys27
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Dot Blot (DB), ChIP DNA-Sequencing (ChIP-seq), Immunocytochemistry (ICC), Cleavage Under Targets and Tagmentation (CUT&Tag)

## Product Details

Immunogen:	This antibody was raised against a peptide including trimethyl-lysine 27 of histone H3.
Isotype:	IgG
Characteristics:	<p>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). 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,</p>

## Product Details

ADP-ribosylation, carbonylation and SUMOylation, they play a major role in regulating gene expression. Histone H3K27 can be mono-, di- or trimethylated by different histone methyltransferases, such as EZH2 or NSD3. While histone methylation can be associated with transcriptional activation or repression, methylation of Lysine 27 of histone H3 is mainly associated with transcriptional repression. Histone H3K27me3 antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, ChIP-Seq, CUT&Tag, Dot blot, Immunocytochemistry, Immunofluorescence, Immunohistochemistry and Western blot, it has been shown to react with Human and Mouse samples, but it is predicted that it will react with a wide range of sample types.

Purification:	Protein A Chromatography
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## Target Details

Target:	Histone 3 (H3)
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Alternative Name:	Histone H3 ( <a href="#">H3 Products</a> )
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Molecular Weight:	17 kDa
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NCBI Accession:	<a href="#">NP_003522</a>
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## Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
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Restrictions:	For Research Use only
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## Handling

Buffer:	Purified IgG in PBS ( pH 7.5) with 30 % glycerol and 0.035 % sodium azide.
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Preservative:	Sodium azide
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Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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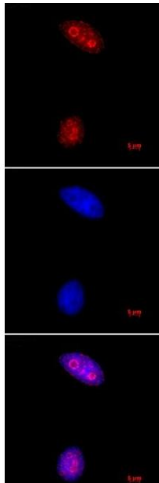
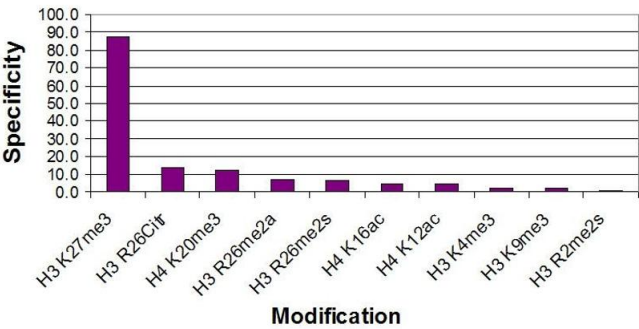
Storage:	-20 °C
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Storage Comment:	Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage.
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Publications

Product cited in: Kee, Thudium, Renner, Glastad, Palozola, Zhang, Li, Lan, Cesare, Poleshko, Kiseleva, Truitt, Cardenas-Diaz, Zhang, Xie, Kotton, Alysandratos, Epstein, Shi et al.: "SARS-CoV-2 disrupts host epigenetic regulation via histone mimicry." in: **Nature**, (2022) ([PubMed](#)).

Images

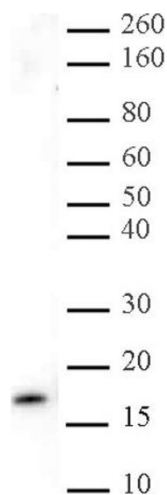


Peptide Array

**Image 1.** Histone H3 trimethyl Lys27 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 Lys27 antibody was applied at a dilution of 1:5,000 to MODified Histone Peptide Array. The arrays were scanned with ArrayAnalysis Software 7 and the results plotted. Specificity data is shown for the most reactive peptides and those related to the immunogen. Recognition of the H3 trimethyl Lys27 peptides by the antibody blocked by phosphorylation at Ser28. Array Data File

Immunofluorescence

**Image 2.** Histone H3K27me3 pAb tested by immunofluorescence. HeLa cells stained with Histone H3 trimethyl Lys27 antibody (1.7 µg/mL dilution). Top panel: Histone H3 trimethyl Lys27 antibody. Middle: DAPI. Bottom: Merge of both images.



**Western Blotting**

**Image 3.** Histone H3K27me3 pAb tested by Western blot. HeLa cell nuclear extract (20 µg) probed with Histone H3K27me3 pAb at 1 µg/mL.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN6971918.