

## Datasheet: MCA6379

<b>Description:</b>	RAT ANTI HUMAN HISTONE H3 (Ac9)
<b>Specificity:</b>	HISTONE H3 (Ac9)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2G1F9
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.1 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			0.5 ug/ml - 2 ug/ml
Immunofluorescence	▪			1 ug/ml - 2 ug/ml
Chromatin Immunoprecipitation	▪			5 ug per CHIP - 10 ug per CHIP

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

### Target Species

Human

### Species Cross Reactivity

Based on sequence similarity, is expected to react with: Broad

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

### Product Form

Purified IgG - liquid

### Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

### Buffer Solution

Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.035% Sodium Azide (NaN <sub>3</sub> ) 30% Glycerol
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	A peptide containing acetyl-lysine 9 of human histone H3
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P68431</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">8968</a>    HIST1H3F    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	H3FA, H3FB, H3FC, H3FD, H3FF, H3FH, H3FI, H3FJ, H3FK, H3FL
<b>Specificity</b>	<p><b>Rat anti Human histone H3 (Ac9) antibody, clone 2G1F9</b> recognizes histone H3 when acetylated at lysine 9.</p> <p>Histone H3 is one of the four core histones that make up the nucleosome core particle. Nucleosomes are the smallest subunit of chromatin and are made up of 146 bp of DNA wrapped around an octamer comprised of pairs of the four core histones (H2A, H2B, H3, and H4) (<a href="#">Smith, 1991</a>). Lysine residues within the N-terminal tail protruding from the histone core of the nucleosome are acetylated and deacetylated as part of gene regulation. Hyperacetylation of histone tails makes chromatin more accessible to DNA-binding proteins by weakening histone-DNA and nucleosome-nucleosome interactions (<a href="#">Kuo and Allis, 1998</a>). Acetylation of histone H3 at lysine 4 usually leads to the transcriptional activation of genes (<a href="#">Hazzlin and Mahadevan, 2005</a>).</p> <p>Wide species cross-reactivity is expected from Rat anti Human histone H3 (Ac9) antibody based on sequence.</p>
<b>Storage</b>	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10049 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA6379">https://www.bio-rad-antibodies.com/SDS/MCA6379</a> 10049

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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