

Datasheet: MCA6292

**BATCH NUMBER 155765**

<b>Description:</b>	RABBIT ANTI HISTONE H2A/H4 (pSer1)
<b>Specificity:</b>	HISTONE H2A/H4 (pSer1)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RM216
<b>Isotype:</b>	IgG
<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
ELISA	▪			1 µg/ml - 0.2 µg/ml
Western Blotting	▪			2 µg/ml - 0.5 µg/ml
Immunocytochemistry	▪			2 µg/ml - 1 µg/ml

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: Mouse, Rat

**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

Protein A affinity purified from an animal origin-free culture supernatant

### Buffer Solution

Phosphate buffered saline

### Preservative

0.09% Sodium Azide

<b>Stabilisers</b>	1% Bovine Serum Albumin 50% Glycerol
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	A phospho-peptide corresponding to Phospho-Histone H2A (pSer1)
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P16104</a>    <a href="#">Related reagents</a></p> <p><a href="#">P62805</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">3014</a>    H2AFX    <a href="#">Related reagents</a></p> <p><a href="#">554313</a>    HIST2H4B    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	H2AX, H4/A, H4/B, H4/C, H4/D, H4/E, H4/G, H4/H, H4/I, H4/J, H4/K, H4/M, H4/N, H4/O, H4F2, H4FA, H4FB, H4FC, H4FD, H4FE, H4FG, H4FH, H4FI, H4FJ, H4FK, H4FM, H4FN, H4FO, HIST2H4
<b>Specificity</b>	<b>Rabbit anti Histone H2A/H4 (pSer1) antibody</b> recognizes Histone H2AX, and Histone H4 when phosphorylated at serine 1. In eukaryotic cells, histones are proteins which associate with nuclear DNA and help condense it into chromatin, playing important roles in gene regulation. Histone H2AX is a member of the histone 2A (H2A) family, which constitutes 2 to 25% of mammalian histone H2A ( <a href="#">Dickey et al. 2009</a> ). H2AX involved with nucleosomal organization of chromatin. H2AX can act as a tumor suppressor that plays key roles in repair of DNA double-strand breaks and genome stability during mitotic and meiotic division ( <a href="#">Weyemi et al. 2016</a> ). The role of H2AX in chromatin remodeling also extends to stem cell development, and to maintenance of cellular senescence ( <a href="#">Turinetto and Giachino 2015</a> ). Like histone H2A, histone 4 (H4) is a core histone involved with condensing chromatin ( <a href="#">Dai et al. 2008</a> ). Histone H4 is phosphorylated at serine 1 during DNA damage, and is localized to the double-strand break (DSB). This phosphorylation is mediated by CK2, and appears to function in DSB repair ( <a href="#">Cheung et al. 2005</a> ).
<b>Storage</b>	Store at -20°C only. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10048 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA6292">https://www.bio-rad-antibodies.com/SDS/MCA6292</a> 10048
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

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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)

'M376272:210127'

Printed on 25 Mar 2023

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