

## Datasheet: MCA6143

<b>Description:</b>	RAT ANTI BrdU
<b>Specificity:</b>	BrdU
<b>Other names:</b>	5-BROMODEOXYURIDINE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RF04-2
<b>Isotype:</b>	IgG2b
<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
Flow Cytometry	▪			1/400 - 1/2000
Immunohistology - Paraffin	▪			

**The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range.** Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Chemical
<b>Product Form</b>	Purified IgG - lyophilized
<b>Reconstitution</b>	Reconstitute with 0.1 ml distilled water
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	5% Trehalose

## Stabilisers

### Approx. Protein Concentrations

IgG concentration 1.0 mg/ml

### Immunogen

Bromodeoxyuridine

### Specificity

**Rat anti BrdU antibody, clone RF04-2** recognizes bromodeoxyuridine (known as BrdU or BrdUrd). BrdU is a synthetic thymidine analog, which is incorporated into the newly synthesized DNA during replication instead of thymidine.

Antibody detection of incorporated BrdU in cellular DNA is extensively referenced as an accurate method to monitor cell proliferation *in vivo* and *in vitro*. In cell proliferation assays BrdU staining is coupled with the use of a dye that binds total DNA such as propidium iodide (PI). BrdU can be administered diluted in the culture medium or, *in vivo* via intraperitoneal injection, subcutaneous osmotic pump implants ([Tesfaiqzi et al. 2004](#)) or in drinking water ([Moser et al. 2004](#)).

BrdU can be used as a thymidine analog in a wide range of organisms ranging from mammalian cells, through reptiles and amphibians to invertebrate species and plants.

Rat anti BrdU antibody, clone RF04-2, has been tested in flow cytometry.

### References

1. Araragi, N. *et al.* (2025) Acute Optogenetic Stimulation of Serotonin Neurons Reduces Cell Proliferation in the Dentate Gyrus of Mice. [ACS Chem Neurosci. Feb 12 \[Epub ahead of print\]](#).

### Storage

Store at -20°C only.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

### Guarantee

12 months from date of despatch

### Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories

### Health And Safety Information

Material Safety Datasheet documentation #20509 available at: <https://www.bio-rad-antibodies.com/SDS/MCA614320509>

### Regulatory

For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)

[DyLight®800](#)

Rabbit Anti Rat IgG (STAR17...)

[FITC](#)

Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</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 (STAR69...)	<a href="#">FITC</a>

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