

## Datasheet: BUF012B

**BATCH NUMBER 159921**

<b>Description:</b>	alamarBlue®
<b>Name:</b>	alamarBlue®
<b>Format:</b>	Reagent
<b>Product Type:</b>	Accessory Reagent
<b>Quantity:</b>	100 ml

### 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	▪			
Immunofluorescence	▪			
Functional Assays	▪			

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.

#### Product Form

Liquid

#### Preservative Stabilisers

None present

#### Product Information

The cell proliferation assay reagent alamarBlue® is designed to provide a rapid and sensitive measure of cell proliferation and cytotoxicity in various human and animal cell lines, bacteria and fungi.

alamarBlue® is an indicator dye, that incorporates an oxidation-reduction (REDOX) indicator that both fluoresces and changes colour in response to the chemical reduction of growth medium, resulting from cell growth. The alamarBlue® cell proliferation assay reagent is designed to quantitatively measure the proliferation of various human and animal cell lines, bacteria and fungi.

**Some variability in the absorbance may occur between batches of alamarBlue® but all batches should fall between 0.84 and 0.95AU when measured between 600nm and 602nm on a spectrophotometer.**

Please view the full [cell proliferation assay instructions](#).

[Colorimetric and Fluorescence result calculators](#) are available here.

This site includes:

Frequently Asked Questions

Example calculations

Product-related references.

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#### Test Principle

Cell proliferation assay

- Growing cells cause a chemical reduction of alamarBlue®.
- Continued growth maintains a reduced environment. (fluorescent, red).
- Inhibition of growth maintains an oxidized environment. (non-fluorescent, blue).
- Data may be collected using either fluorescence-based or absorbance-based instrumentation.
- Fluorescence is monitored at 530-560nm excitation wavelength and 590nm emission wavelength.
- Absorbance is monitored at 570nm and 600nm.

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#### Intended Use

- Cell proliferation assays.
- The reagent can be used to establish proliferation or relative cytotoxicity in a cell proliferation assay.
- Baseline data for predicting the toxicity of related novel agents can be compared to baseline data with known in-vivo toxicity.
- alamarBlue® is for use between pH6.8 and pH7.4.

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#### Instructions For Use

Instructions for use can be found at [www.bio-rad-antibodies.com/uploads/IFU/BUF012B.pdf](http://www.bio-rad-antibodies.com/uploads/IFU/BUF012B.pdf)

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<b>Further Reading</b>	1. Rampersad SN (2012) Multiple applications of Alamar Blue as an indicator of metabolic function and cellular health in cell viability bioassays. <a href="#">Sensors (Basel). 12 (9): 12347-60.</a>
<b>Storage</b>	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.
<b>Guarantee</b>	Guaranteed until date of expiry. Please see product label.
<b>Acknowledgements</b>	Manufactured for Bio-Rad by Trek Diagnostic System. U.S. patent 5,501,959.

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**Health And Safety Information**      Material Safety Datasheet documentation #10289 available at:  
<https://www.bio-rad-antibodies.com/SDS/BUF012B>  
10289

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**Regulatory**                      For research purposes only

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## Related Products

### Recommended Useful Reagents

[alamarBlue® \(BUF012A\)](#)

**North & South**      Tel: +1 800 265 7376

**America**              Fax: +1 919 878 3751

                            Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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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://www.bio-rad-antibodies.com/datasheets)  
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**Printed on 21 Jun 2024**

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