

## Datasheet: BUF012B

**BATCH NUMBER 171286**

|                      |                   |
|----------------------|-------------------|
| <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.

|                                 |               |
|---------------------------------|---------------|
| <b>Product Form</b>             | Liquid.       |
| <b>Preservative Stabilisers</b> | 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>Acknowledgements</b>              | Manufactured for Bio-Rad by Trek Diagnostic System. U.S. patent 5,501,959.                                                                                                  |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10289 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/BUF012B">https://www.bio-rad-antibodies.com/SDS/BUF012B</a> |
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