# Datasheet: BUF012B

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| **Description:** | alamarBlue® |
| **Name:** | alamarBlue® |
| **Format:** | Reagent |
| **Product Type:** | Accessory Reagent |
| **Quantity:** | 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.

| | 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.

**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.

**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.

**Instructions For Use**

Instructions for use can be found at www.bio-rad-antibodies.com/uploads/IFU/BUF012B.pdf.

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| **Further Reading** | 1. Rampersad SN (2012) Multiple applications of Alamar Blue as an indicator of metabolic function and cellular health in cell viability bioassays. Sensors (Basel). 12 (9): 12347-60. |
| **Storage** | Store at +4°C. DO NOT FREEZE.<br>This product should be stored undiluted. This product is photosensitive and should be protected from light. |
| **Guarantee** | Guaranteed until date of expiry. Please see product label. |
| **Acknowledgements** | Manufactured for Bio-Rad by Trek Diagnostic System. U.S. patent 5,501,959. |
| **Health And Safety Information** | Material Safety Datasheet documentation #10289 available at:<br>https://www.bio-rad-antibodies.com/SDS/BUF012B<br>10289 |
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**Printed on 21 Jun 2024**