

Datasheet: BUF012B

BATCH NUMBER 161397

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. 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:
<https://www.bio-rad-antibodies.com/SDS/BUF012B>
10289

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

[alamarBlue® \(BUF012A\)](#)

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