

## Datasheet: BUF012A

**BATCH NUMBER 169797**

Description:	alamarBlue®
Name:	alamarBlue®
Format:	Reagent
Product Type:	Accessory Reagent
Quantity:	25 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
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Preservative Stabilisers	None present
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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.
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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.

<b>Test Principle</b>	<p>Cell proliferation assay.</p> <ul style="list-style-type: none"><li>• Growing cells cause a chemical reduction of alamarBlue.</li><li>• Continued growth maintains a reduced environment. (fluorescent, red).</li><li>• Inhibition of growth maintains an oxidized environment. (non-fluorescent, blue).</li><li>• Data may be collected using either fluorescence-based or absorbance-based instrumentation.</li><li>• Fluorescence is monitored at 530-560nm excitation wavelength and 590nm emission wavelength.</li><li>• Absorbance is monitored at 570nm and 600nm.</li></ul>
<b>Intended Use</b>	<ul style="list-style-type: none"><li>• Cell proliferation assays.</li><li>• The reagent can be used to establish proliferation or relative cytotoxicity in a cell proliferation assay.</li><li>• Baseline data for predicting the toxicity of related novel agents can be compared to baseline data with known <i>in-vivo</i> toxicity.</li><li>• alamarBlue is for use between pH6.8 and pH7.4.</li></ul>
<b>Instructions For Use</b>	Instructions for use can be found at <a href="http://www.bio-rad-antibodies.com/uploads/IFU/BUF012A.pdf">www.bio-rad-antibodies.com/uploads/IFU/BUF012A.pdf</a> .
<b>References</b>	<ol style="list-style-type: none"><li>1. Nakayama, G.R. <i>et al.</i> (1997) Assessment of the Alamar Blue assay for cellular growth and viability <i>in vitro</i>. <a href="#">J Immunol Methods. 204: 205-8.</a></li><li>2. Latham, J.P. <i>et al.</i> (2000) Prostate-specific antigen promoter/enhancer driven gene therapy for prostate cancer: construction and testing of a tissue-specific adenovirus vector. <a href="#">Cancer Res. 60: 334-41.</a></li><li>3. McCormick, A.L. <i>et al.</i> (2001) Immunization with an interferon-gamma-gp120 fusion protein induces enhanced immune responses to human immunodeficiency virus gp120. <a href="#">J Infect Dis. 184: 1423-30.</a></li><li>4. Brieger, A. <i>et al.</i> (2002) Transient mismatch repair gene transfection for functional analysis of genetic hMLH1 and hMSH2 variants. <a href="#">Gut. 51: 677-84.</a></li><li>5. Naughton, P. <i>et al.</i> (2002) Induction of heme oxygenase 1 by nitrosative stress. A role for nitroxyl anion. <a href="#">J Biol Chem. 277: 40666-74.</a></li><li>6. Scapagnini, G. <i>et al.</i> (2002) Caffeic acid phenethyl ester and curcumin: a novel class of heme oxygenase-1 inducers. <a href="#">Mol Pharmacol. 61: 554-61.</a></li><li>7. Tiwari, A. <i>et al.</i> (2002) Development of a hybrid cardiovascular graft using a tissue engineering approach. <a href="#">FASEB J. 16: 791-6.</a></li><li>8. Guo, Y. <i>et al.</i> (2002) An antiangiogenic urokinase-derived peptide combined with tamoxifen decreases tumor growth and metastasis in a syngeneic model of breast cancer. <a href="#">Cancer Res. 62: 4678-84.</a></li></ol>

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This product should be stored undiluted. This product is photosensitive and should be

protected from light.

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<b>Acknowledgements</b>	Manufactured for Bio-Rad by Trek Diagnostic System. U.S. patent 5,501,959.
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