

# PrestoBlue™ Cell Viability Reagent Protocol

Catalog Number: A13261 and A13262

Literature Part Number: MAN0003232

Literature Lot Number: V1

Revision date: 11 October 2010

## FAST FACTS

PrestoBlue™ Cell Viability Reagent is a ready-to-use reagent for rapidly evaluating the viability and proliferation of a wide range of cell types. PrestoBlue™ reagent is quickly reduced by metabolically active cells, providing a quantitative measure of viability and cytotoxicity in as little as 10 minutes. Protect reagent from long term exposure to light and avoid contamination, as this can reduce sensitivity.

Catalog no.	Amount	Storage and Handling
A13261	25 mL	Store at 4°C, protected from light. Avoid contamination.
A13262	100 mL	

## Quick Reference Protocol

- PrestoBlue™ Cell Viability Reagent is supplied as a 10X solution. Add PrestoBlue™ Reagent directly to cells in culture medium. See below for example volumes:

Format	Volume of Cells + Media	Volume of PrestoBlue™ Reagent
Cuvette	900 µL	100 µL
96 well plate	90 µL	10 µL
384 well plate	36 µL	4 µL

**Note:** Correct for background fluorescence by including control wells containing only cell culture media (no cells) on each plate.

- Incubate ≥10 minutes at 37° C. Longer incubation times will increase sensitivity of detection. As this is a live cell assay, readings may be taken at multiple time points to determine optimal performance in your lab.

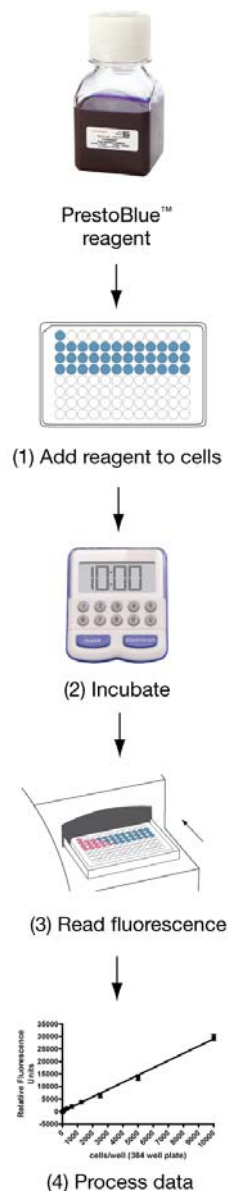
Format	Recommended Incubation Time
Bottom-read fluorescence	10 minutes – 2 hours
Top-read fluorescence	30 minutes – 2 hours
Absorbance	20 minutes – 2 hours
Room temperature incubation	10 minutes – 2 hours
Low cell number (< 5,000 cells/100 µL)	20 minutes – 24 hours

- Read fluorescence or absorbance. Fluorescence is more sensitive than absorbance and is the preferred detection method.

Format	Excitation	Emission
General	540–570 nm	580–610 nm
Fluorescence (Monochromator)	560 nm (10 nm bandwidth)	590 nm (10 nm bandwidth)
Fluorescence (Filter)	535 nm (25 nm bandwidth)	615 nm (10 nm bandwidth)
Absorbance	570 nm	600 nm (reference wavelength for normalization)

- Calculate and plot the results. Higher fluorescence or absorbance values correlate to greater total metabolic activity.

Format	Instructions
Fluorescence	<ol style="list-style-type: none"> <li>Optional: Average the fluorescence values of the no-cell control wells and subtract from the fluorescence value of each experimental well.</li> <li>Plot fluorescence vs. experimental condition (cell number, compound concentration).</li> </ol>
Absorbance	<ol style="list-style-type: none"> <li>Normalize the 570 nm values to the 600 nm values for the experimental wells.</li> <li>Plot the normalized 570 nm absorbance values vs. experimental condition (cell number, compound concentration).</li> </ol>



---

## Technical Support

For additional assistance in using PrestoBlue™ Cell Viability Reagent, please contact the Molecular Probes technical support team. Email [probestech@invitrogen.com](mailto:probestech@invitrogen.com) or phone (800) 438-2209 or (541) 335-0353.

---

## Frequently Asked Questions

Please visit [www.invitrogen.com](http://www.invitrogen.com) and search for A13261 or A13262 to download answers to Frequently Asked Questions (FAQs) for this product. The FAQ sheet is located under the "How to Use" tab on the product page.

---

## Purchaser Notification

**Limited Use Label License No. 358: Research Use Only.** Not intended for any animal or human therapeutic or diagnostic use.

The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased amount of the product only to perform internal research for the sole benefit of the purchaser. No right to resell this product or any of its components is conveyed expressly, by implication, or by estoppel. This product is for internal research purposes only and is not for use in commercial applications of any kind, including, without limitation, quality control and commercial services such as reporting the results of purchaser's activities for a fee or other form of consideration. For information on obtaining additional rights, please contact [outlicensing@lifetech.com](mailto:outlicensing@lifetech.com) or Out Licensing, Life Technologies, 5791 Van Allen Way, Carlsbad, California 92008.

### We would like your feedback

Please let us know how you like this Product Information Sheet.

Visit [www.invitrogen.com/feedbacksurvey](http://www.invitrogen.com/feedbacksurvey) to take a quick 5-minute survey about your experience and get a free gift upon completion.\*

All customers who complete this survey will receive a free gift.

\*Available while supplies last. Offer void where prohibited by federal, state, or local laws or regulation or agency/institutional policy.

The performance of this product is guaranteed for six months from the date of purchase if stored and handled properly.

The trademarks mentioned herein are the property of Life Technologies Corporation or their respective owners.

©2010 Life Technologies Corporation. All rights reserved.

---

For Technical Support, email [probestech@invitrogen.com](mailto:probestech@invitrogen.com) or phone (800) 438-2209 or (541) 335-0353

Corporate Headquarters • 5791 Van Allen Way • Carlsbad, CA 92008 • Phone: 760 603 7200 • FAX: 760 602 6500 • [www.invitrogen.com](http://www.invitrogen.com)