Red hydrogen peroxide assay kit

Red Hydrogen Peroxide Assay Kit provides a simple absorbance-based or fluorometric assay to detect and quantify hydrogen peroxide or peroxidase activity in biochemical assays, cell extracts and in live cells. It can also be used to detect a variety of oxidase activities through enzyme-coupled reactions. The kit is an optimized ‘mix and read’ assay that is suitable for both 96- and 348-well formats and is compatible with HTS liquid handling.

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Ordering Information

Order Online »

ENZ-51004	1Kit

Manuals, SDS & CofA

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- **Flexible:** Quantify hydrogen peroxide in solution, in cell extracts or directly from certain cells
- **Versatile:** Detect a variety of oxidase activities through enzyme-coupled reactions
- **Sensitive:** Detect as little as 10 picomoles of hydrogen peroxide
- **Complete:** Mix and read reagents, with minimal hands-on time
- **Convenient:** Homogenous assay format, fully compatible with HTS automation

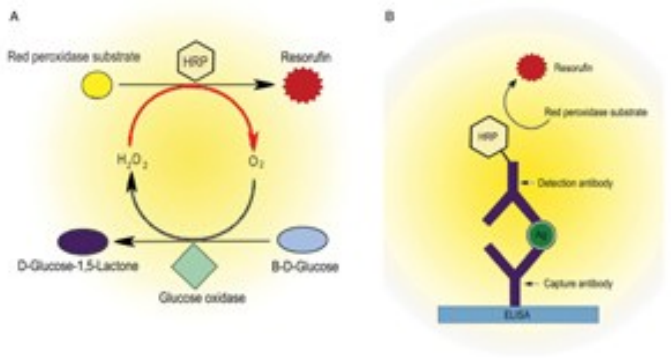


Figure 1: Conversion of Red Peroxidase Substrate into Resorufin. Horseradish peroxidase uses Red Peroxidase substrate as an electron donor during the reduction of hydrogen peroxide to water. The resultant product, Resorufin, is a highly colored and fluorescent compound. (A) Use of assay for detection of glucose oxidase activity. (B) Use of assay in ELISA format to detect HRP-antibody conjugate.

Handling & Storage

Use/Stability	Stable for at least one year after receipt when stored as recommended.
Long Term Storage	-20°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application

Fluorescence microscopy, HTS

Contents

Red Peroxidase Substrate (1 vial)
Horseradish Peroxidase (HRP) (20 units)
Hydrogen Peroxide (H_2O_2) Stock Solution (200 µl)
DMSO (1 ml)
Assay Buffer (100 ml)

Quality Control

A sample kit from each lot of Red Hydrogen Peroxide Assay Kit is used to detect H_2O_2 using the protocols described in the user manual. **Minimum Specifications:** 1. A minimum of 10 picomoles of H_2O_2 must be detected in solution under normal conditions. 2. Fluorescence-based detection must yield H_2O_2 specific excitation and emission signals at 570 nm and 585 nm, respectively. 3. Absorbance-based detection must yield an H_2O_2 specific signal at OD_{576}.

Quantity

For 5 x 96-well plates.

Technical Info / Product Notes

This product is a member of the CELLESTIAL® product line, reagents and assay kits comprising fluorescent molecular probes that have been extensively benchmarked for live cell analysis applications. CELLESTIAL® reagents and kits are optimal for use in demanding imaging applications, such as confocal microscopy, flow cytometry and HCS, where consistency and reproducibility are required.

ENZO LIFE SCIENCES, Inc.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

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