abcam

Product datasheet

Peroxide Assay Kit ab272537

1 Image

Overview

Product name Peroxide Assay Kit

Detection methodColorimetric

Sample type Urine, Serum, Plasma, Other biological fluids, Cell Lysate, Cell culture media

Assay type Quantitative

Range $0.2 \,\mu\text{M} - 30 \,\mu\text{M}$

Product overview Peroxide Assay Kit (ab272537) is a simple, direct and automation-ready procedures for

quantitative determination of peroxide find wide applications in research and drug discovery. This assay kit is designed to measure peroxide concentration in biological samples without any pretreatment. The improved method utilizes the chromogenic Fe^{3+} -xylenol orange reaction, in which a purple complex is formed when Fe^{2+} provided in the reagent is oxidized to Fe^{3+} by peroxides present in the sample. The intensity of the color, measured at 540-610nm, is an accurate measure of the peroxide level in the sample. The optimized formulation substantially

reduces interference by substances in the raw samples.

Sensitive and accurate. Enhanced color intensity using sorbitol. Detection range 0.2 μM (7

ng/mL) to 30 μ M (1,020 ng/mL) H₂O₂ in 96-well plate assay.

Simple and high-throughput. The procedure involves addition of a single detection reagent and incubation for 30 min. Can be readily automated as a high-throughput assay in 96-well plates

for thousands of samples per day.

Tested applications Suitable for: Functional Studies

Platform Microplate

Properties

Storage instructions Store at +4°C. Please refer to protocols.

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Components	250 tests
Reagent A	1 x 1ml
Reagent B	1 x 50ml
Standard (3% stabilized H ₂ O ₂)	1 x 100µl

Relevance

Hydrogen Peroxide (H_2O_2) is a reactive oxygen metabolic byproduct that serves as a key regulator for a number of oxidative stress-related states. Functioning through NF-kB and other factors, hydroperoxide-mediated pathways have been linked to asthma, inflammatory arthritis, atherosclerosis, diabetic vasculopathy, osteoporosis, neuro-degenerative diseases, Down's syndrome and immune system diseases.

Applications

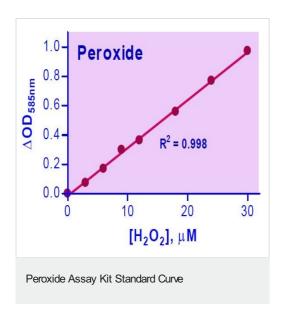
The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab272537 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



Typical standard curve – data provided for demonstration purposes only. A new standard curve must be generated for each assay performed.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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