abcam

Product datasheet

# Lipid Peroxidation (MDA) Assay Kit (Colorimetric) ab233471

16 References 2 Images

## Overview

| | |
|---|---|
| **Product name** | Lipid Peroxidation (MDA) Assay Kit (Colorimetric) |
| **Detection method** | Colorimetric |
| **Sample type** | Adherent cells, Suspension cells, Tissue Lysate |
| **Product overview** | Lipid Peroxidation (MDA) Assay Kit (Colorimetric) ab233471 enables researchers to detect MDA without the heating steps required by the TBARS assay conventionally used for MDA detection.<br><br>In this MDA assay, the MDA Color Reagent reacts with MDA to generate a blue color product which is measured at 695 nm with absorbance microplate readers. The assay is very fast and specific for MDA with little interference from other aldehydes.<br><br>Alternatively, see our popular **TBARS assay kit for MDA measurement ab118970**.<br><br>MDA assay protocol summary for ab233471:<br>- add samples and standards to wells<br>- add MDA color reagent and incubate for 10-30 min at room temp<br>- add reaction solution and incubate for 30-60 min at room temp<br>- analyze with microplate reader |
| **Notes** | Lipid peroxidation is characterized by the oxidative degradation of unsaturated fatty acids, phospholipids, glycolipids, cholesterol esters and cholesterol. Malondialdehyde (MDA) is one of the most commonly used biomarkers for lipid peroxidation.<br><br>Running an MDA assay has historically relied on a reaction with thiobarbituric acid (the TBARS assay) to generate a product that can be measured colorimetrically at 532 nm or fluorimetrically at Ex/Em = 530/550 nm.<br><br>However, the TBARS assay has quite a few limitations:<br>- the reaction is not specific to MDA,<br>- the TBA-MDA reaction needs be run under acidic conditions,<br>- the TBARS assay needs be run under high temperature, commonly at 90-100 ºC. |
| **Tested applications** | **Suitable for:** Functional Studies |
| **Platform** | Microplate reader |

## Properties

**Storage instructions** Store at -20°C. Please refer to protocols.

| Components | 200 tests |
|---|---|
| Dilution Buffer | 1 x 10ml |
| MDA Color Reagent | 1 vial |
| MDA Standard | 1 vial |
| Reaction Solution | 1 x 10ml |

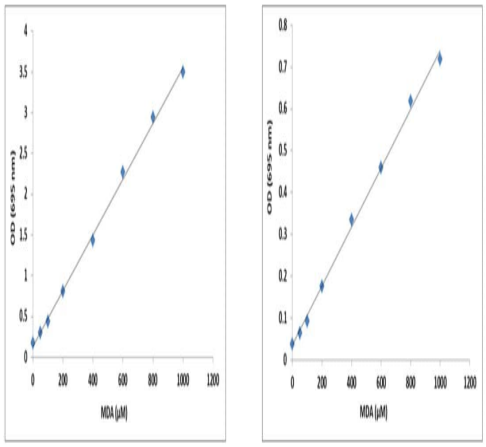
## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab233471 in the following tested applications.

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

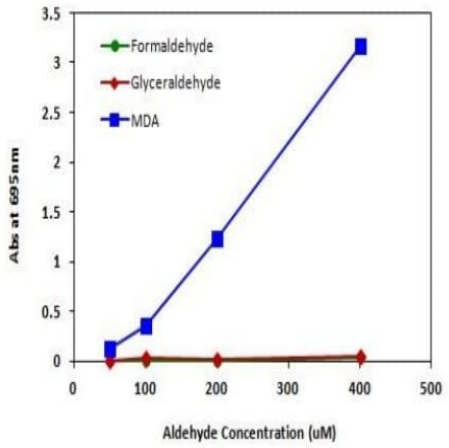
| Application | Abreviews | Notes |
|---|---|---|
| **Functional Studies** | | Use at an assay dependent concentration. |

## Images




Lipid Peroxidation (MDA) Assay Kit (Colorimetric) Standard Curve

MDA dose response was measured with AB233471 on a 96-well clear bottom microplate using a SpectraMax microplate reader (Molecular Devices). (Pathcheck on (Left image); Pathcheck off (Right image))




Signal Comparison of MDA, Formaldehyde, and Glyceraldehyde

Signal Comparison of MDA, Formaldehyde, and Glyceraldehyde

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