

## Product datasheet

# Catalase Activity Assay Kit (Colorimetric/Fluorometric) ab83464

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### Overview

<b>Product name</b>	Catalase Activity Assay Kit (Colorimetric/Fluorometric)
<b>Detection method</b>	Colorimetric/Fluorometric
<b>Sample type</b>	Urine, Serum, Plasma, Cell Lysate, Tissue Lysate
<b>Assay type</b>	Enzyme activity (quantitative)
<b>Assay time</b>	0h 40m
<b>Species reactivity</b>	<b>Reacts with:</b> Mammals
<b>Product overview</b>	<p>Catalase Activity Assay Kit (Colorimetric/Fluorometric) (ab83464) is a highly sensitive, simple and direct assay for measuring catalase activity in a variety of biological samples such as cell and tissue lysates or biological fluids.</p> <p>In the catalase activity assay protocol, the catalase present in the sample reacts with hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) to produce water and oxygen. The unconverted H<sub>2</sub>O<sub>2</sub> reacts with probe to produce a product that can be measured colorimetrically at OD 570 nm or fluorometrically at Ex/Em = 535/587 nm. Therefore, the catalase activity present in the sample is reversely proportional to the signal obtained. The kit can detect as little as 1 µU of catalase activity.</p> <p>Catalase activity assay protocol summary:</p> <ul style="list-style-type: none"> <li>- add samples and standards to wells</li> <li>- add stop solution into sample control wells and incubate at 25°C for 5 min</li> <li>- add H<sub>2</sub>O<sub>2</sub> solution into wells and incubate for 30 min at 25°C</li> <li>- add stop solution</li> <li>- add developer mix and incubate for 10 min at 25°C</li> <li>- analyze with microplate reader</li> </ul>
<b>Notes</b>	<p>This product is manufactured by BioVision, an Abcam company and was previously called K773 Catalase Activity Colorimetric/Fluorometric Assay Kit. K773-100 is the same size as the 100 test size of ab83464.</p>
<b>Platform</b>	Microplate reader

### Properties

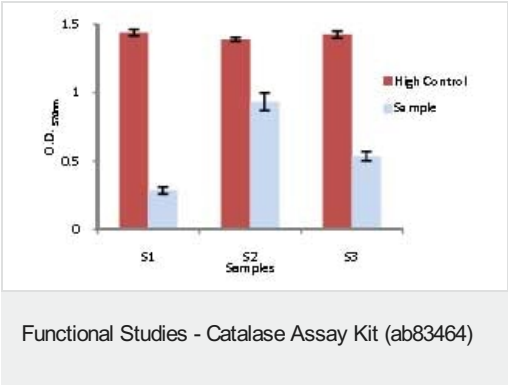
Storage instructions

Store at -20°C. Please refer to protocols.

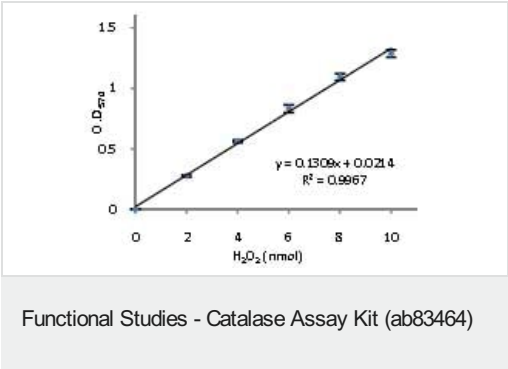
Components	100 tests	2000 tests	100 tests
Assay Buffer VIII	1 x 25ml	20 x 25ml	1 x 25ml
Catalase Positive Control	1 x 20µl	20 x 20µl	1 x 2µl
Developer Solution V	1 vial	20 vials	1 vial
Hydrogen Peroxide Solution II	1 x 25µl	20 x 25µl	1 x 25µl
OxiRed Probe	1 x 200µl	20 x 200µl	1 x 200µl
Stop Solution III	1 x 1ml	20 x 1ml	1 x 1ml

Function	Occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic effects of hydrogen peroxide. Promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells.
Involvement in disease	Defects in CAT are the cause of acatalasia (ACATLAS) [MIM:115500]; also known as acatalasemia. This disease is characterized by absence of catalase activity in red cells and is often associated with ulcerating oral lesions.
Sequence similarities	Belongs to the catalase family.
Post-translational modifications	The N-terminus is blocked.
Cellular localization	Peroxisome.

Images



Sample tests using ab83464.



H<sub>2</sub>O<sub>2</sub> standard curve using ab83464.

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

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