

# Superoxide Dismutase Activity Assay Kit (Colorimetric) ab65354

★★★★★ [2 Abreviews](#) [242 References](#) [4 图像](#)

### 概述

产品名称	Superoxide Dismutase Activity Assay试剂盒(Colorimetric)
检测方法	Colorimetric
样品类型	Urine, Serum, Plasma, Other biological fluids, Tissue Extracts, Cell Lysate, Cell culture media
检测类型	Enzyme activity
检测时间	0h 30m
种属反应性	与反应: Mammals, Other species
产品概述	Superoxide Dismutase Activity Assay Kit (Colorimetric) ab65354 is a simple and rapid assay for superoxide dismutase (SOD) activity.

In the SOD assay protocol:

- superoxide anions are produced by the action of xanthine oxidase
- SOD catalyzes the dismutation of the superoxide anion into hydrogen peroxide and O<sub>2</sub>
- superoxide anions act on WST-1 to produce a water-soluble formazan dye which can be detected by the increase in absorbance at 450 nm

The greater the activity of SOD in the sample, the less formazan dye is produced.

Superoxide dismutase assay protocol summary:

- add samples to wells
- add WST-1 working solution and enzyme working solution and incubate for 20 min at 37°C
- analyze with microplate reader

### 说明

This product is manufactured by BioVision, an Abcam company and was previously called K335 Superoxide Dismutase (SOD) Activity Colorimetric Assay Kit. K335-100 is the same size as the 100 test size of ab65354.

Superoxide dismutase (SOD) is one of the most important antioxidative enzymes. It catalyzes the dismutation of the superoxide anion into hydrogen peroxide and molecular oxygen.

### Related products

Review the [oxidative stress marker and assay guide](#) to learn about more assays for oxidative stress.

### 平台

Microplate reader

### 性能

存放说明

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

组件	100 tests	2000 tests
SOD Assay Buffer	1 x 20ml	20 x 20ml
SOD Dilution Buffer	1 x 10ml	20 x 10ml
SOD Enzyme Solution	1 vial	20 vials
WST Reagent II	1 x 1ml	20 x 1ml

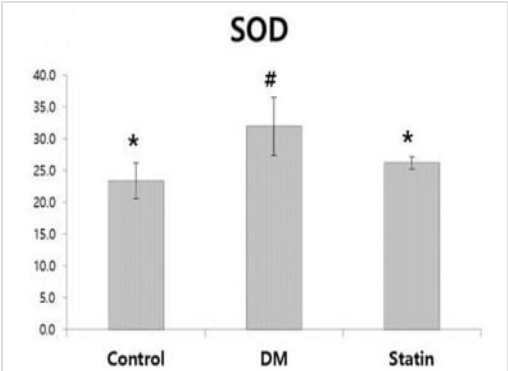
相关性

Superoxide dismutase (SOD) is an antioxidant enzyme involved in the defense system against reactive oxygen species (ROS). SOD catalyzes the dismutation reaction of superoxide radical anion (O<sub>2</sub><sup>-</sup>) to hydrogen peroxide, which is then catalyzed to innocuous O<sub>2</sub> and H<sub>2</sub>O by glutathione peroxidase and catalase. Several classes of SOD have been identified. These include intracellular copper, zinc SOD (Cu, Zn SOD/SOD1), mitochondrial manganese SOD (Mn SOD/SOD2) and extracellular Cu, Zn SOD (EC SOD/SOD3).

细胞定位

Cytoplasmic

图片



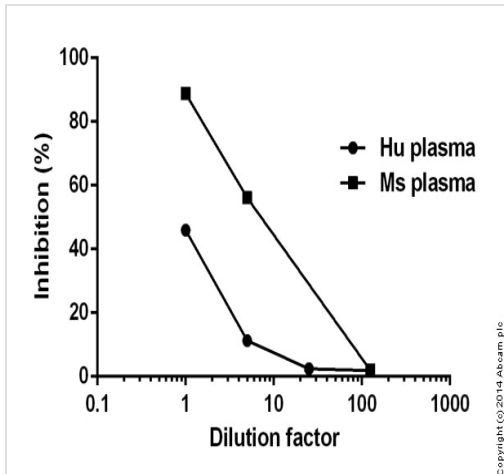
Park J et al., PLoS One 12:e0172751 (2017)

Functional studies - ab65354

Image from Park J et al., PLoS One 12(2), fig 4b. Doi: 10.1371/journal.pone.0172751 Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>

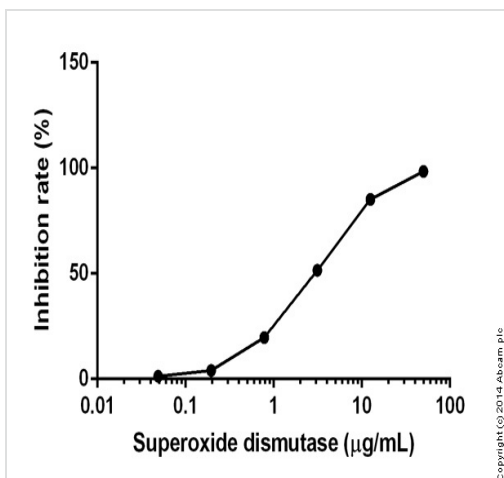
Park J et al investigates the recovery in erectile function after administration of chronic statin alone in DM (streptozotocin (STZ)-induced diabetes mellitus) rats. SOD activity was determined using Superoxide Dismutase activity assay kit (ab65354).

\* Indicates statistical significance in comparison with DM group (P < 0.05). # Indicates statistical significance in comparison with the statin group (P<0.05).



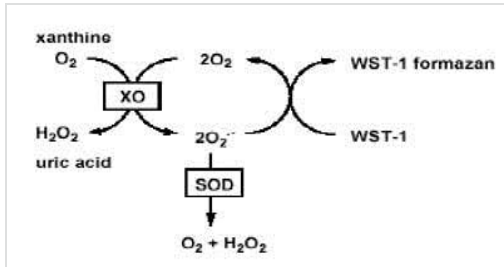
Superoxide dismutase measured in biofluids at various dilutions

Functional Studies- Superoxide Dismutase Activity  
Assay Kit (ab65354)



Superoxidase dismutase (**ab90040**) measured showing inhibition rate (%) per concentration (microgram per mL)

Functional Studies - Superoxide Dismutase Activity  
Assay Kit (Colorimetric) (ab65354)



Principle of Superoxide Dismutase Assay.

Functional Studies - Superoxide Dismutase Activity  
Assay Kit (Colorimetric) (ab65354)

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

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