


## Product datasheet

### Anti-SOD2/MnSOD antibody ab13533

★★★★★ [30 Abreviews](#) [301 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-SOD2/MnSOD antibody
<b>Description</b>	Rabbit polyclonal to SOD2/MnSOD
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat <b>Predicted to work with:</b> Human 
<b>Immunogen</b>	Recombinant fragment corresponding to Human SOD2/MnSOD. Database link: <a href="#">P04179</a>
<b>Positive control</b>	WB: Mouse Brain ; Rat Brain ; Rat Brain Membrane; Mouse Liver ; Mouse Hepatocytes
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.1% Sodium azide Constituents: PBS, 50% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	This antibody was immunoaffinity purified.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab13533 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
WB	★★★★★ (22)	1/5000. Detects a band of approximately 25 kDa (predicted molecular weight: 26.6 kDa).

## Target

### Function

Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.

### Involvement in disease

Genetic variation in SOD2 is associated with susceptibility to microvascular complications of diabetes type 6 (MVCD6) [MIM:612634]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.

### Sequence similarities

Belongs to the iron/manganese superoxide dismutase family.

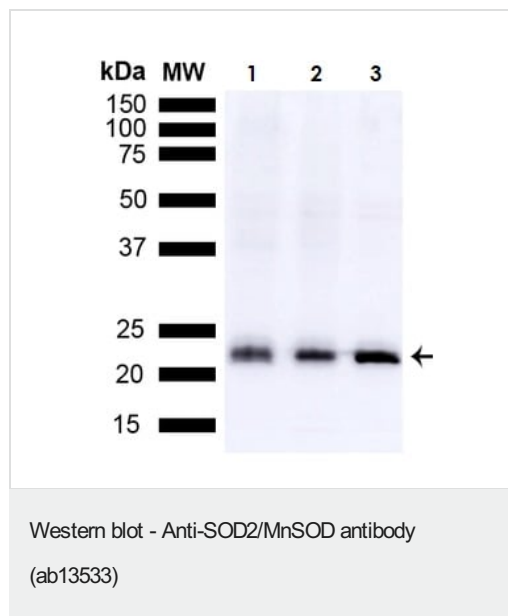
### Post-translational modifications

Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity.

### Cellular localization

Mitochondrion matrix.

## Images



**All lanes :** Anti-SOD2/MnSOD antibody (ab13533) at 1/1000 dilution (o/n at 4degC)

**Lane 1 :** Mouse brain

**Lane 2 :** Rat brain

**Lane 3 :** Rat brain membrane

Lysates/proteins at 15 µg per lane.

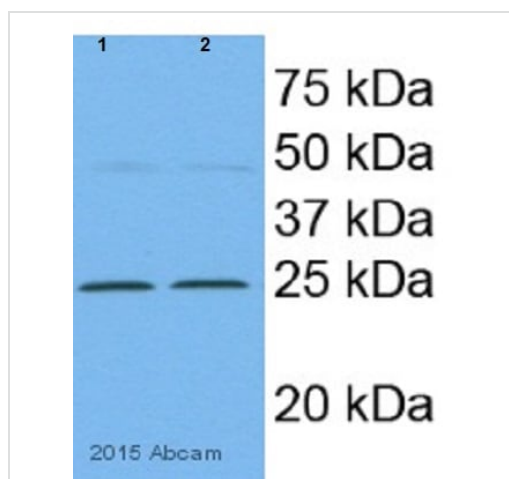
### Secondary

**All lanes :** Goat anti-rabbit IgG HRP for 1 hr at RT with shaking at 1/5000 dilution

**Predicted band size:** 26.6 kDa

Block: 5% Skim Milk powder in TBST.

Color Development: Chemiluminescent for HRP for 5 min at RT.



Western blot - Anti-SOD2/MnSOD antibody  
(ab13533)  
Image courtesy of anonymous abreviewer

**All lanes :** Anti-SOD2/MnSOD antibody (ab13533) at 1/5000 dilution

**Lane 1 :** mouse liver whole cell lysate

**Lane 2 :** mouse hepatocytes whole cell lysate

#### Secondary

**All lanes :** Goat anti-rabbit HRP conjugate at 1/20000 dilution

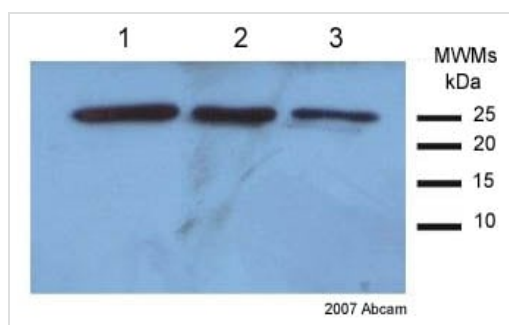
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 26.6 kDa

**Observed band size:** 24 kDa

**Exposure time:** 15 seconds



Western blot - Anti-SOD2/MnSOD antibody  
(ab13533)

This image is courtesy of an Abreview submitted by Dr  
sandra sobocanec

**All lanes :** Anti-SOD2/MnSOD antibody (ab13533) at 1/5000 dilution

**Lane 1 :** 2ug mouse liver homogenate supernatant

**Lane 2 :** 1ug mouse liver homogenate supernatant

**Lane 3 :** 0.5ug mouse liver homogenate supernatant

#### Secondary

**All lanes :** HRP conjugated donkey anti-rabbit antibody

Performed under reducing conditions.

**Predicted band size:** 26.6 kDa

**Observed band size:** 25 kDa

**Exposure time:** 10 seconds

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

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