

Anti-SOD2/MnSOD antibody [EPR2560Y] - BSA and Azide free ab227846

敲除验证
重组
RabMAb

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概述

产品名称	Anti-SOD2/MnSOD抗体[EPR2560Y] - BSA and Azide free
描述	兔单克隆抗体[EPR2560Y] to SOD2/MnSOD - BSA and Azide free
宿主	Rabbit
经测试应用	<p>适用于: WB, IHC-P</p> <p>不适用于: Flow Cyt, ICC/IF or IP</p>
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Rat brain lysate, SH-SY5Y, A549 and HEK-293T cell lysates. IHC-P: Human liver tissue sections.
常规说明	<p>ab227846 is the carrier-free version of ab68155.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2

无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR2560Y
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab227846于以下的经测试应用**

“应用说明”部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

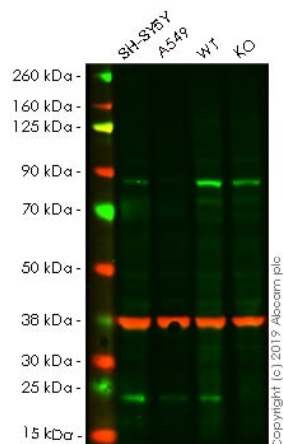
应用	Ab评论	说明
WB		Use at an assay dependent concentration. Detects a band of approximately 25 kDa (predicted molecular weight: 25 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

应用说明 Is unsuitable for Flow Cyt, ICC/IF or IP.

靶标

功能	Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.
疾病相关	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.
序列相似性	Belongs to the iron/manganese superoxide dismutase family.
翻译后修饰	Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity.
细胞定位	Mitochondrion matrix.

图片



Western blot - Anti-SOD2/MnSOD antibody
[EPR2560Y] - BSA and Azide free (ab227846)

All lanes : Anti-SOD2/MnSOD antibody [EPR2560Y] ([ab68155](#)) at 1/1000 dilution

Lane 1 : SHSY5Y cell lysate

Lane 2 : A549 cell lysate

Lane 3 : Wild-type HEK-293T cell lysate

Lane 4 : SOD2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

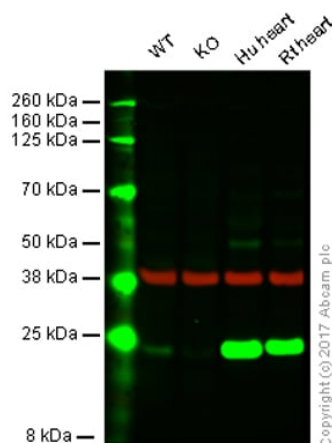
Predicted band size: 25 kDa

Observed band size: 29 kDa

This data was developed using the same antibody clone in a different buffer formulation ([ab68155](#)).

Lanes 1 - 4: Merged signal (red and green). Green - [ab68155](#) observed at 22 kDa. Red - loading control, [ab8245](#) observed at 37 kDa.

[ab68155](#) was shown to react with SOD2/MnSOD in wild-type HEK-293T. Loss of signal was observed when knockout cell line [ab255434](#) (knockout cell lysate [ab263835](#)) was used. Wild-type and SOD2/MnSOD knockout samples were subjected to SDS-PAGE. [ab68155](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-SOD2/MnSOD antibody
[EPR2560Y] - BSA and Azide free (ab227846)

All lanes : Anti-SOD2/MnSOD antibody [EPR2560Y] ([ab68155](#)) at 1/1000 dilution

Lane 1 : Wild-type HAP1 cell lysate

Lane 2 : SOD2 knockout HAP1 cell lysate

Lane 3 : Human heart tissue lysate

Lane 4 : Rat heart tissue lysate

Lysates/proteins at 20 µg per lane.

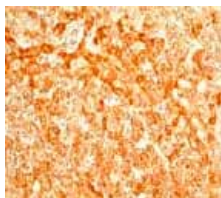
Performed under reducing conditions.

Predicted band size: 25 kDa

This WB data was generated using the same anti-SOD2 antibody clone, EPR2560Y, in a different buffer formulation (Cat# [ab68155](#)).

Lanes 1 - 4: Merged signal (red and green). Green - [ab68155](#) observed at 29 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

[ab68155](#) was shown to specifically react with SOD2 when SOD2 knockout samples were used. Wild-type and SOD2 knockout samples were subjected to SDS-PAGE. [ab68155](#) and [ab8245](#) (loading control to GAPDH) were diluted at 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed [ab216776](#) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOD2/MnSOD antibody [EPR2560Y] - BSA and Azide free (ab227846)

This IHC data was generated using the same anti-SOD2 antibody clone, EPR2560Y, in a different buffer formulation (cat# **ab68155**).

ab68155 at 1:100 dilution staining Superoxide Dismutase 2 in human liver tissue sections.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

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