abcam

Product datasheet

Anti-SOD2/MnSOD antibody [EPR2560Y] ab68155





重组 RabMAb

★★★★★ 2 Abreviews 55 References 5 图像

概述

产品名称 Anti-SOD2/MnSOD抗体[EPR2560Y]

描述 兔单克隆抗体[EPR2560Y] to SOD2/MnSOD

宿主 Rabbit

经测试应用 适用于: WB, IHC-P

不适用于: Flow Cyt,ICC/IF or IP

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide within Human SOD2/MnSOD aa 1-100 (N terminal). The exact sequence is

proprietary.

阳性对照 WB: SH-SY5Y, A549, HEK-293T and HAP1 cell lysates; Human heart tissue; Rat brain and heart

lysate. IHC-P: Human liver tissue sections. IHC-Fr: Rat lung tissue sections.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR2560Y

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab68155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	****(1)	1/1000 - 1/2000. Detects a band of approximately 25 kDa (predicted molecular weight: 25 kDa).
IHC-P		1/100 - 1/250. 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

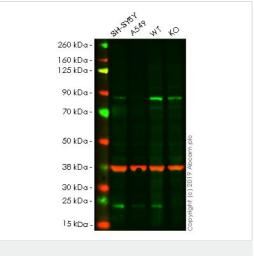
characterized by vascular permeability and increased tissue ischemia and angiogenesis.

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] (ab68155)

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

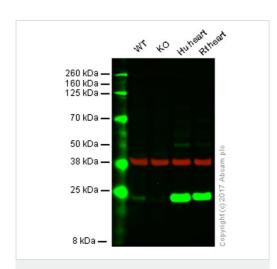
Lane 4: SOD2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 25 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab68155 observed at 22 kDa. Red - loading control, <u>ab8245</u> 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] (ab68155)

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

Lanes 1 - 4: Merged signal (red and green). Green - ab68155 observed at 29 kDa. Red - loading control, <u>ab8245</u>, 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 <u>ab8245</u> (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 lgG H&L (IRDye® 800CW) preadsorbed <u>ab216773</u> and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed <u>ab216776</u> secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.

kDa 1 2

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Western blot - Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155)

All lanes : Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155) at 1/500 dilution

Lane 1 : Rat brain lysate Lane 2 : SH-SY5Y lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

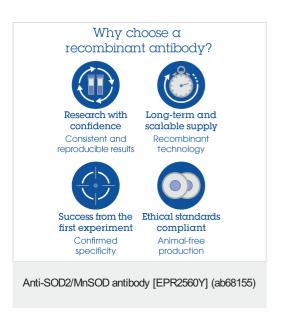
Predicted band size: 25 kDa **Observed band size:** 25 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOD2/MnSOD antibody [EPR2560Y] (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.



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