


Anti-SOD2/MnSOD antibody [mAbcam 74231] ab74231

敲除 验证

★★★★☆ [2 Abreviews](#) [2 References](#) [3 图像](#)

概述

产品名称	Anti-SOD2/MnSOD抗体[mAbcam 74231]
描述	小鼠单克隆抗体[mAbcam 74231] to SOD2/MnSOD
宿主	Mouse
经测试应用	适用于: WB 不适用于: Flow Cyt (Intra)
种属反应性	与反应: Rat, Human 预测可用于: Mouse, Rabbit, Horse, Guinea pig, Cow, Pig, Chimpanzee, Zebrafish, Cynomolgus monkey, Macaque monkey, Orangutan 
免疫原	Synthetic peptide within Human SOD2/MnSOD aa 50-150 conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. Database link: P04179
阳性对照	WB: Recombinant human SOD2/MnSOD protein (ab93946), human liver; human brain; human heart; rat brain tissue lysates and Wild-type HEK-293T cell lysate.
常规说明	<p>This monoclonal antibody to SOD2 has been knockout validated in Western blot. The expected band for SOD2 was observed in wild type cells and the band was not seen in knockout cells.</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <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&As</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
纯度	Protein G purified
克隆	单克隆
克隆编号	mAbcam 74231
骨髓瘤	Sp2/0-Ag14
同种型	IgG1

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用 ab74231 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)	Use a concentration of 1 µg/ml. Detects a band of approximately 23 kDa (predicted molecular weight: 25 kDa). We recommend using 3% milk as the blocking agent in Western Blot.

应用说明 Is unsuitable for Flow Cyt (Intra).

靶标

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

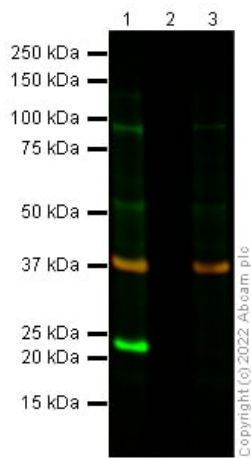
疾病相关 Genetic variation in SOD2 is associated with susceptibility to microvascular complications of diabetes type 6 (MVCD6) [MIM:612634]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy 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
[mAbcam 74231] (ab74231)

Lane 1: Wild-type HEK-293T cell lysate (40 ug)

Lane 2: Empty Lane

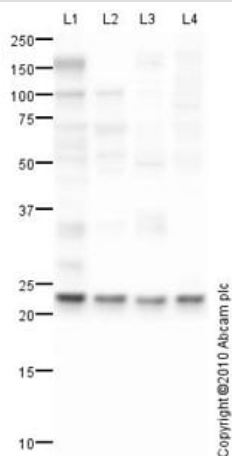
Lane 3: SOD2 knockout HEK-293T cell lysate (40 ug)

Lanes 1 - 3: Merged signal (red and green). Green - ab74231 observed at 25 kDa. Orange - loading control, **ab181602**, observed at 37 kDa.

Gel type: MES

Blocking buffer: 3% Milk

ab74231 was shown to specifically react with SOD2. Wild-type and SOD2 knockout samples were subjected to SDS-PAGE. ab74231 and **ab181602** GAPDH (loading control) were diluted 1 µg/mL and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-SOD2/MnSOD antibody
[mAbcam 74231] (ab74231)

All lanes : Anti-SOD2/MnSOD antibody [mAbcam 74231] (ab74231) at 5 µg/ml

Lane 1 : Human liver tissue lysate - total protein (**ab29889**)

Lane 2 : Human heart tissue lysate - total protein (**ab29431**)

Lane 3 : Human brain tissue lysate - total protein (**ab29466**)

Lane 4 : Brain (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 25 kDa

Observed band size: 23 kDa

Exposure time: 5 minutes

The Superoxide dismutase 2 protein has a predicted molecular weight of 25-kDa. However, the sequence contains a 24 residue transit peptide at the N-terminus and, when cleaved, the protein has an expected molecular weight of approximately 23-kDa.

We recommend using 3% milk as the blocking agent in Western Blot.



Anti-SOD2/MnSOD antibody [mAbcam 74231] (ab74231) at 1 µg/ml + Recombinant Human SOD2/MnSOD protein ([ab82656](#)) at 0.01 µg

Secondary

Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 25 kDa

Exposure time: 12 minutes

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