


Anti-SOD2/MnSOD antibody [mAbcam 74231] ab74231

KO 評価済

★★★★☆ 2 Abreviews 2 References 画像数 3

製品の概要

製品名	Anti-SOD2/MnSOD antibody [mAbcam 74231]
製品の詳細	Mouse monoclonal [mAbcam 74231] to SOD2/MnSOD
由来種	Mouse
アプリケーション	適用あり: WB 適用なし: Flow Cyt (Intra)
種交差性	交差種: Rat, Human 交差が予測される動物種: 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
ポジティブ・コントロール	WB: Recombinant human SOD2/MnSOD protein (ab93946), human liver; human brain; human heart; rat brain tissue lysates and Wild-type HEK-293T cell lysate.
特記事項	<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>

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
精製度	Protein G purified
ポリ/モノ	モノクローナル
クローン名	mAbcam 74231
ミエローマ	Sp2/0-Ag14
アイソタイプ	IgG1

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab74231の使用に適用されます**
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

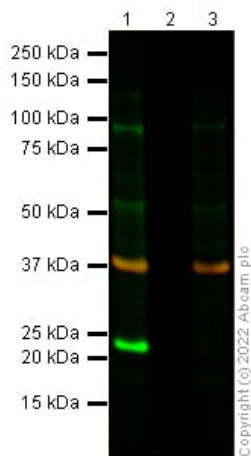
アプリケーション	Abreviews	特記事項
WB	★☆☆☆☆ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 23 kDa (predicted molecular weight: 25 kDa). We recommend using 3% milk as the blocking agent in Western Blot.

追加情報 Is unsuitable for Flow Cyt (Intra).

ターゲット情報

機能	Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.
関連疾患	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.
配列類似性	Belongs to the iron/manganese superoxide dismutase family.
翻訳後修飾	Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity.
細胞内局在	Mitochondrion matrix.

画像



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

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

Lane 2: Empty Lane

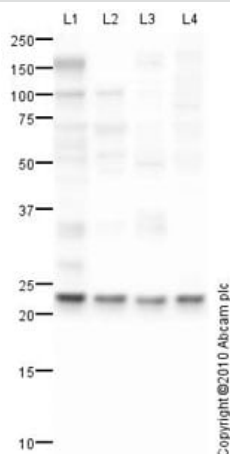
Lane 3: SOD2 knockout HEK-293T cell lysate (40 ug)

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

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors