abcam

Product datasheet

Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] ab137037

יולצעבע RabMAb

★★★★★ 4 Abreviews 81 References 画像数 11

製品の概要

製品名 Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2]

製品の詳細 Rabbit monoclonal [EPVANR2] to SOD2/MnSOD (acetyl K68)

由来種 Rabbit

特異性 This antibody only detects SOD2/MnSOD when acetylated at Lysine 68. According to BLAST

analysis, the antibody might cross-react with Fer (Uniprot P70451) isoform 3 in mouse samples.

No experiment has been done to confirm this possibility.

アプリケーション 適用あり: IHC-P, WB, Dot blot

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide within Human SOD2/MnSOD (acetyl K68). The exact sequence is proprietary.

Database link: P04179

(Peptide available as ab176149)

ポジティブ・コントロール WB: Mouse heart lysate. Rat kidney tissue lysate. SOD2 transfected HEK-293T lysate. IHC-P:

Human cervical carcinoma. Human carcinoma kidney tissue. Rat liver tissue. Mouse kidney

tissue. Human muscle tissue.

特記事項 This antibody was developed as part of a collaboration with the lab of David Guis at Vanderbilt

University.

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**.

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.

Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol, 59% PBS

精製度 Protein A purified

ポリ/モノ モノクローナル **ウローン名** EPVANR2

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab137037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検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
WB	★★★★★ (4)	1/1000 - 1/10000. Predicted molecular weight: 24 kDa.
Dot blot		1/1000.

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

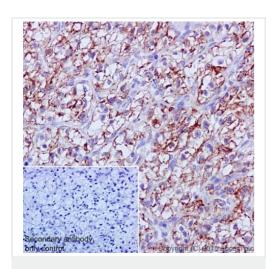
characterized by vascular permeability and increased tissue ischemia and angiogenesis.

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.

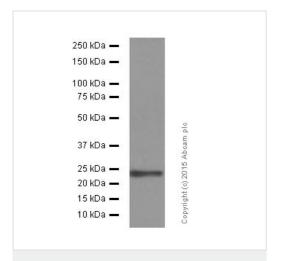
画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human clear cell carcinoma kidney tissue labelling SOD2 (acetyl K68) with purified ab137037 at 1/150. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a goat anti-rabbit lgG H&L (HRP) was used as the secondary antibody (1/500).

Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Western blot - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

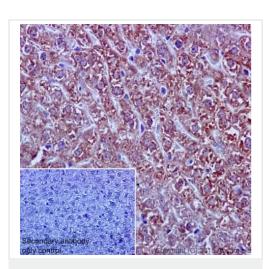
Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037) at 1/1000 dilution (purified) + Mouse heart lysate at 20 μ g

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 24 kDa

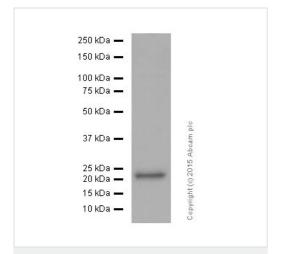
Blocking/Dilution buffer and concentration: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue labelling SOD2 (acetyl K68) with purified ab137037 at 1/150. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a goat antirabbit lgG H&L (HRP) was used as the secondary antibody (1/500).

Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Western blot - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

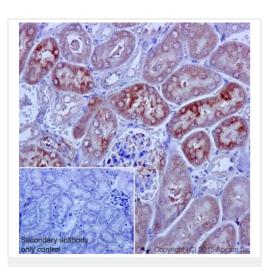
Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037) at 1/1000 dilution (purified) + Rat kidney tissue lysate at $20~\mu g$

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 24 kDa

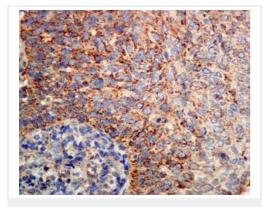
Blocking/Dilution buffer and concentration: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue labelling SOD2 (acetyl K68) with purified ab137037 at 1/150. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a goat anti-rabbit IgG H&L (HRP) was used as the secondary antibody (1/500).

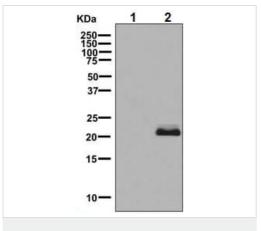
Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cervical carcinoma tissue labelling SOD2 (acetyl K68) with unpurified ab137037 at 1/100 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

All lanes : Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037) at 1/1000 dilution (unpurified)

Lane 1: Non transfected HEK-293T lysate

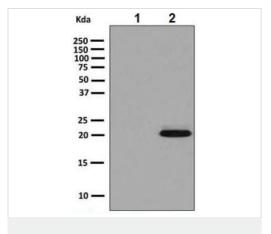
Lane 2: SOD2 transfected HEK-293T lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP conjugated Goat anti Rabbit lgG at 1/2000 dilution

Predicted band size: 24 kDa



Western blot - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

All lanes : Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037) at 1/1000 dilution (unpurified)

Lane 1: Non transfected HEK-293T cell lysate with with Acetyl SOD2 (K68) peptide

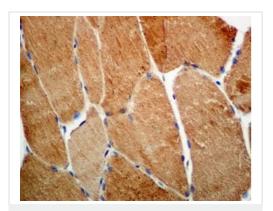
Lane 2: SOD2 transfected HEK-293T cell lysate with control peptide

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP conjugated Goat anti Rabbit lgG at 1/2000 dilution

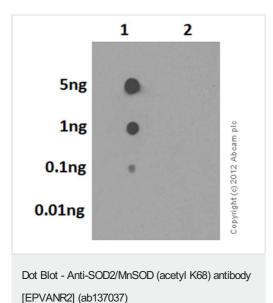
Predicted band size: 24 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOD2/MnSOD (acetyl K68) antibody [EPVANR2] (ab137037)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human muscle tissue labelling SOD2 (acetyl K68) with unpurified ab137037 at 1/100 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



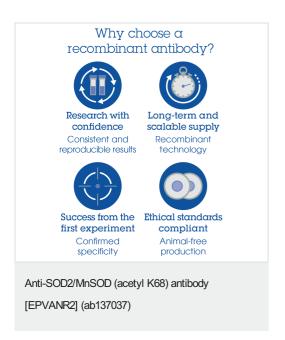
Dot blot analysis labelling SOD2 (acetyl K68) with ab137037 at a dilution of 1/1000. Peroxidase conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody at a dilution of 1/2500.

Blocking and diluting buffer: 5% NFDM/TBST.

Lane 1: SOD2 (acetyl K68) acetylated peptide.

Lane 2: SOD2 Non-acetylated peptide.

Exposure time: 3 minutes.



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