abcam

Product datasheet

Anti-4 Hydroxynonenal antibody ab46545

28 Abreviews 529 References 画像数 2

製品の概要

製品名	Anti-4 Hydroxynonenal antibody
製品の詳細	Rabbit polyclonal to 4 Hydroxynonenal
由来種	Rabbit
特異性	Specifically binds to HNE modified proteins.
アプリケーション	**適用あり:** WB
種交差性	**交差種:** Species independent
免疫原	Chemical/ Small Molecule corresponding to 4 Hydroxynonenal.
特記事項	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. 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

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 long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.20 Preservative: 0.09% Sodium azide Constituent: 99.91% PBS
特記事項（精製）	This antibody was purified by an HNE modified Protein-Sepharose affinity column.
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

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ab46545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
WB	★★★★☆ (11)	1/1000.

ターゲット情報

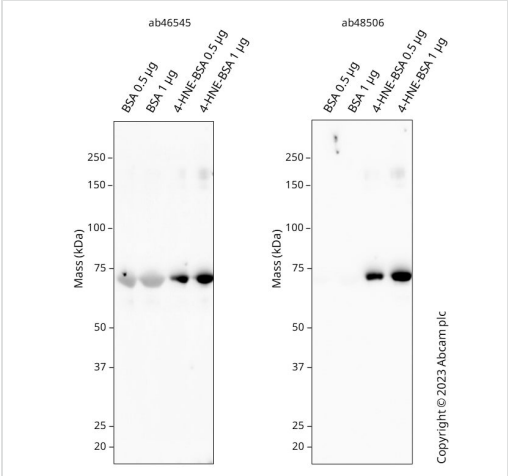
関連性

Aldehydic products of lipid peroxidation, such as 4 hydroxynonenal (4 HNE), have been implicated in the etiology of pathological changes under oxidative stress as a key mediator of oxidative stress induced cell death. It is a stable product of lipid peroxidation, is proarrhythmic and may contribute to the cytotoxic effects of oxidative stress.

細胞内局在

Cytoplasmic

画像



Western blot - Anti-4 Hydroxynonenal antibody (ab46545)

All lanes : Left: ab46545 at 1/1000 dilution
Right: **ab48506**

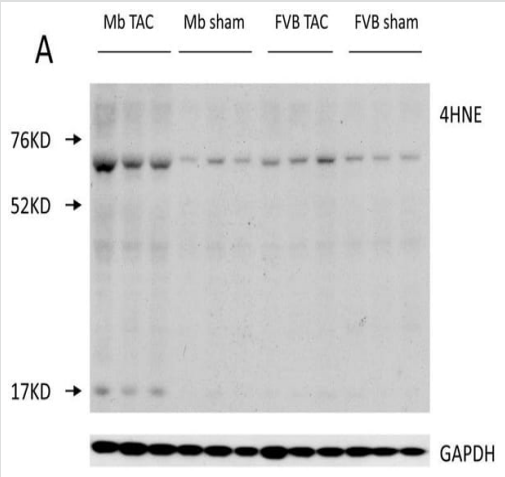
Lane 1 : BSA cell lysate at 0.5 µg
Lane 2 : BSA cell lysate at 1 µg
Lane 3 : 4-Hydroxynonenal (BSA) cell lysate at 0.5 µg
Lane 4 : 4-Hydroxynonenal (BSA) cell lysate at 1 µg

Developed using the ECL technique.

Performed under reducing conditions.

Observed band size: 66 kDa

Western blot: Anti-4-HNE antibody (ab46545) staining at 1/1000 dilution, shown in black. In Western blot, ab46545 binds to 4-HNE but shows some non-specific binding to BSA. We recommend **ab48506** for Western blot of 4-HNE. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1% Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times before development with a high-sensitivity ECL substrate kit and imaged with 3 minutes exposure time. Secondary antibodies used were HRP conjugated Goat anti-Rabbit (H+L) at 1/50000 dilution.



Western blot - Anti-4 Hydroxynonenal antibody (ab46545)

Image from Wang J et al., PLoS One. 2013;8(1):e53951. Fig 7(A).; doi: 10.1371/journal.pone.0053951. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Frozen mouse cardiac tissue was homogenized with lysis buffer containing 50 mmol/L Tris-HCl (pH7.5), 5 mmol/L EDTA, 10 mmol/L EGTA, 1X cock tail protease inhibitor, 1X alkaline phosphatase inhibitor and 1X acid phophatase inhibitor, 50 ug/ml phenylmenthysulfonyl fluoride and 1.23 mg/ml Chaps. Extracts were centrifuged at 12,000 rpm at 4°C for 15 minutes. 10 ug of the sample proteins was mixed with loading buffer (40 mmol/L Tris-HCl, pH 6.8, 1% SDS, 50 mmol/L DTT, 7.5% glycerol and 0.003% bromophenol blue and heated at 95°C for 5 minutes, and subjected to electrophoresis on a gradient gel (4% to 12%) at 120V. After electrophoresis, the protein was transferred to a PVDF membrane in a transfer buffer. The PVDF membrane was rinsed briefly in TBS buffer containing 50 mM Tris, 137 mM NaCl, pH 7.5 and blocked in buffer (5% milk with 0.5% BSA in TBST buffer (TBS buffer containing 0.1% tween 20) at room temperature for 1 hour. The membrane was then incubated with rabbit anti 4-hydroxy-2-noneal (4HNE) antibody at 1/3000 dilution at 4°C over night, followed by washing three times. The secondary antibody was incubated with the membrane for another one hour at room temperature. Finally the antigen-antibody complexes were visualized with use of an enhanced chemiluminescence kit. Anti-GAPDH (Abcam) was used for normalizing.