# abcam

## Product datasheet

# Anti-eNOS antibody [EPR19296] ab199956



重组 RabMAb

★★★★★ 3 Abreviews 35 References 7 图像

概述

产品名称 Anti-eNOS抗体[EPR19296]

描述 兔单克隆抗体[EPR19296] to eNOS

宿主 Rabbit

经测试应用 适用于: IP, WB

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Human fetal heart, fetal kidney and fetal liver lysates; Mouse brain, heart, kidney and spleen

> lysates; Rat brain, heart and spleen lysates; whole cell lysate from HepG2 cells treated with 10 μg/ml LPS for 2 hours and 6 hours; DDDDK tagged human eNOS full length recombinant protein

(aa2-1203) ab198066. IP: HepG2 whole cell lysate.

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 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 long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

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

纯度 Protein A purified

克隆 单克隆 克隆编号 EPR19296

同种型 IgG

#### 应用

The Abpromise guarantee Abpromise™承诺保证使用ab199956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
IP	<b>★★★★</b> (1)	1/50.
WB	<b>★★★★</b> <u>(2)</u>	1/1000. Detects a band of approximately 140 kDa (predicted molecular weight: 133 kDa).

靶	柡

功能 Produces nitric oxide (NO) which is implicated in vascular smooth muscle relaxation through a

cGMP-mediated signal transduction pathway. NO mediates vascular endothelial growth factor (VEGF)-induced angiogenesis in coronary vessels and promotes blood clotting through the

activation of platelets.

Isoform eNOS13C: Lacks eNOS activity, dominant-negative form that may down-regulate eNOS

activity by forming heterodimers with isoform 1.

组织特异性 Platelets, placenta, liver and kidney.

疾病相关 Variation in NOS3 seem to be associated with susceptibility to coronary spasm.

序列相似性 Belongs to the NOS family.

Contains 1 FAD-binding FR-type domain.

Contains 1 flavodoxin-like domain.

翻译后修饰 Phosphorylation by AMPK at Ser-1177 in the presence of Ca(2+)-calmodulin (CaM) activates

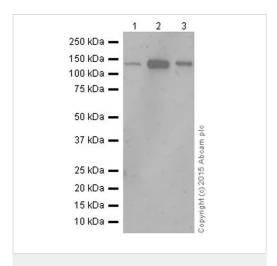
activity. In absence of Ca(2+)-calmodulin, AMPK also phosphorylates Thr-495, resulting in inhibition of activity (By similarity). Phosphorylation of Ser-114 by CDK5 reduces activity.

细胞定位 Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. Specifically

associates with actin cytoskeleton in the G2 phase of the cell cycle and which is favored by

interaction with NOSIP and results in a reduced enzymatic activity.

图片



Western blot - Anti-eNOS antibody [EPR19296] (ab199956)

**All lanes :** Anti-eNOS antibody [EPR19296] (ab199956) at 1/1000 dilution

Lane 1 : Human fetal heart lysate

Lane 2 : Human fetal kidney lysate

Lane 3 : Human fetal liver lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

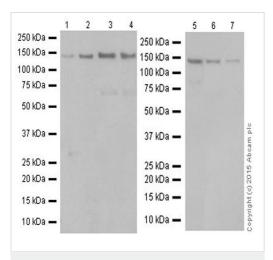
**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

**Predicted band size:** 133 kDa **Observed band size:** 140 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

eNOS is shown to be expressed in platelets, placenta, liver and kidney (UniProt entry P29474). It also plays an important role in the cardiovascular system. (PMID: 15210449 & 15936740).



Western blot - Anti-eNOS antibody [EPR19296] (ab199956)

**All lanes :** Anti-eNOS antibody [EPR19296] (ab199956) at 1/1000 dilution

Lane 1 : Mouse brain lysate

Lane 2: Mouse heart lysate

Lane 3: Mouse kidney lysate

Lane 4: Mouse spleen lysate

Lane 5: Rat brain lysate

Lane 6: Rat heart lysate

Lane 7: Rat spleen lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

**Predicted band size:** 133 kDa **Observed band size:** 140 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1, 2, 3, 4, 6 and 7: 30 seconds; Lane 5: 2 minutes.

eNOS is shown to be expressed in platelets, placenta, liver and kidney (UniProt entry P29474). It also plays an important role in the cardiovascular system. (PMID: 15210449 & 15936740).

2 250 kDa -250 kDa -150 kDa -150 kDa eNOS ← eNOS 100 kDa -100 kDa -75 kDa -75 kDa 🕳 Copyright(C) 2018 Abcam 50 kDa 🕳 50 kDa -37 kDa 🕳 37 kDa -25 kDa -25 kDa — 20 kDa — 20 kDa -15 kDa -15 kDa 🕳 10 kDa -10 kDa 🕳 GAPDH (ab181602)

Western blot - Anti-eNOS antibody [EPR19296] (ab199956)

**All lanes :** Anti-eNOS antibody [EPR19296] (ab199956) at 1/1000 dilution

**Lane 1 :** HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate

**Lane 2 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 133 kDa

Observed band size: 140 kDa

Exposure Time: Lane1: 40 seconds; Lane2: 180 seconds

The expression profile observed in HeLa is consistent with the

literature (PMID: 19925457).

Negative control: HeLa (PMID: 19925457)

**All lanes :** Anti-eNOS antibody [EPR19296] (ab199956) at 1/5000 dilution

**Lane 1 :** HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lane 2: Whole cell lysate from HepG2 cells treated with 10 μg/ml

**Lane 3 :** Whole cell lysate from HepG2 cells treated with 10  $\mu$ g/ml LPS for 6 hours

Lysates/proteins at 20 µg per lane.

1 2 3

250 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
37 kDa —
37 kDa —
20 kDa —
4 20 k

Western blot - Anti-eNOS antibody [EPR19296] (ab199956)

#### **Secondary**

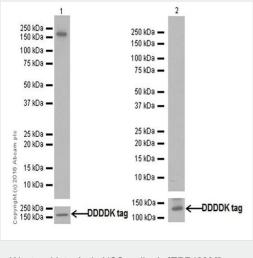
**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

**Predicted band size:** 133 kDa **Observed band size:** 140 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression profile observed is consistent with what has been described in the literature (PMID:17855661 & 11004215).



Western blot - Anti-eNOS antibody [EPR19296] (ab199956)

All lanes: Anti-eNOS antibody [EPR19296] (ab199956) at 1/1000 dilution

Lane 1: Recombinant Human eNOS protein (Tagged) (ab198066) at 0.01 µg

Lane 2: Recombinant Human iNOS protein (ab135010) at 0.05 µg

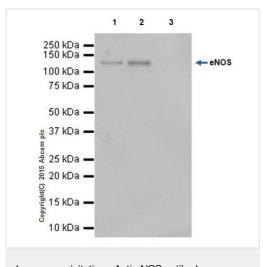
### Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 133 kDa Observed band size: 140 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 1 second; Lane 2: 3 minutes.



Immunoprecipitation - Anti-eNOS antibody [EPR19296] (ab199956)

eNOS was immunoprecipitated from 1 mg of HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with ab199956 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab199956 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

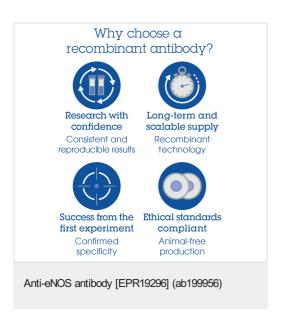
Lane 1: HepG2 whole cell lysate 10 µg (Input).

Lane 2: ab199956 IP in HepG2 whole cell lysate.

Lane 3: Rabbit monoclonal lgG (ab172730) instead of ab199956 in HepG2 whole cell lysate.

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

Exposure time: 3 seconds.



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