abcam

Product datasheet

Anti-eNOS antibody [EPR19296] - BSA and Azide free ab240352



3 Images

Overview

Product name Anti-eNOS antibody [EPR19296] - BSA and Azide free

Description Rabbit monoclonal [EPR19296] to eNOS - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IP

Species reactivity Reacts with: Mouse, Rat, Human

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

Positive control Recombinant Human eNOS protein (Tagged) (ab198066), and and HeLa whole cell lysates can

be used as a positive control in WB.

General notes ab240352 is the carrier-free version of ab199956.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR19296

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab240352 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 140 kDa (predicted molecular weight: 133 kDa).
IP		Use at an assay dependent concentration.

Target

Function 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.

Tissue specificity Platelets, placenta, liver and kidney.

Involvement in diseaseVariation in NOS3 seem to be associated with susceptibility to coronary spasm.

Sequence similarities Belongs to the NOS family.

Contains 1 FAD-binding FR-type domain.

Contains 1 flavodoxin-like domain.

Post-translational Phosphorylation by AMPK at Ser-1177 in the presence of Ca(2+)-calmodulin (CaM) activates modifications activity. In absence of Ca(2+)-calmodulin, AMPK also phosphorylates Thr-495, resulting in

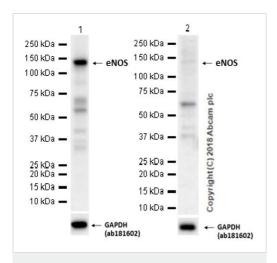
activity. In absence of Ca(2+)-calmodulin, AMPK also phosphorylates Thr-495, resulting in inhibition of activity (By similarity). Phosphorylation of Ser-114 by CDK5 reduces activity.

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Cellular localizationCell 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.



Western blot - Anti-eNOS antibody [EPR19296] - BSA and Azide free (ab240352)

All lanes : Anti-eNOS antibody [EPR19296] (<u>ab199956</u>) 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)

1 2 3

250 kDa —
150 kDa —
150 kDa —
75 kDa —
50 kDa —
37 kDa —
16 meny 25 kDa —
175 kDa —

Immunoprecipitation - Anti-eNOS antibody

[EPR19296] - BSA and Azide free (ab240352)

eNOS was immunoprecipitated from 1 mg of HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with <u>ab199956</u> at 1/50 dilution. Western blot was performed from the immunoprecipitate using <u>ab199956</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), 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 $\lg G$ ($\underline{ab172730}$) instead of $\underline{ab199956}$ in HepG2 whole cell lysate.

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

Exposure time: 3 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab199956</u>).



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