

Product datasheet

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

Recombinant RabMAb

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 HeLa whole cell lysates can be used as a positive control in WB.
General notes	<p>ab240352 is the carrier-free version of ab199956.</p> <p>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.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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

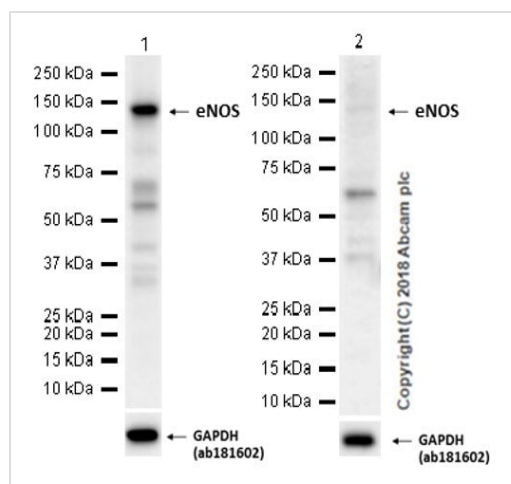
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab240352 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 140 kDa (predicted molecular weight: 133 kDa). We recommend using freshly made lysate in western blot testing to get stronger band and avoid high background.
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 disease	Variation 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 modifications	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.
Cellular localization	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.

Images



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

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) (**ab97051**) at 1/20000 dilution

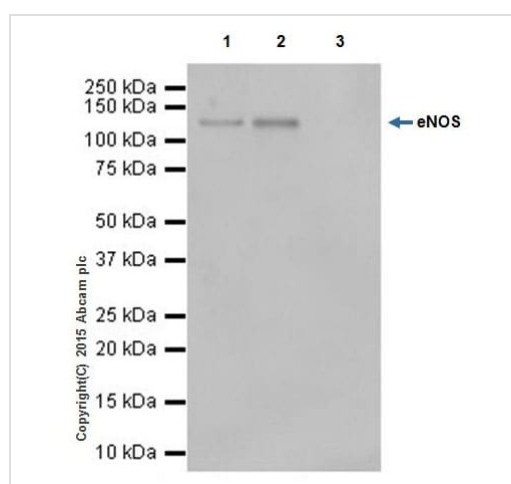
Predicted band size: 133 kDa

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)



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 **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 IgG (**ab172730**) instead of **ab199956** in HepG2 whole cell lysate.


Blocking and dilution buffer and concentration: 5% NFDN/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 (**ab199956**).

Why choose a recombinant antibody?



- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

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

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

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