# abcam

# Product datasheet

# Anti-eNOS (phospho S1177) antibody [EPR20991] - BSA and Azide free ab230158



RabMAb

### 2 References 4 图像

#### 概述

产品名称 Anti-eNOS (phospho S1177)抗体[EPR20991] - BSA and Azide free

描述 兔单克隆抗体[EPR20991] to eNOS (phospho S1177) - BSA and Azide free

宿主 Rabbit

经测试应用 适用于: WB, Dot blot, IP 中属反应性 与反应: Mouse, Human

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

阳性对照 WB: HUVEC +/- VEGF, whole cell lysate.

常规说明 ab230158 is the carrier-free version of <u>ab215717</u>.

Our <u>carrier-free</u> 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 cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> 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<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> 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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

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#### 性能

形式 Liquid

**存放**说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**存储溶液** pH: 7.2

Constituent: PBS

纯**度** Protein A purified

**克隆** 单克隆

**克隆编号** EPR20991

**同种型** IgG

#### 应用

The Abpromise guarantee Abpromise™承诺保证使用ab230158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
WB		Use at an assay dependent concentration. Detects a band of approximately 140 kDa (predicted molecular weight: 133 kDa).
Dot blot		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

# 靶标

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.

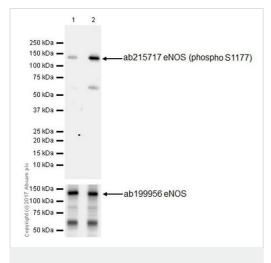
翻译后修饰 Phosphorylation by AMPK at Ser-1177 in the presence of Ca(2+)-calmodulin (CaM) activates

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.



Western blot - Anti-eNOS (phospho S1177) antibody [EPR20991] - BSA and Azide free (ab230158) **All lanes :** Anti-eNOS (phospho S1177) antibody [EPR20991] (ab215717) at 1/1000 dilution

**Lane 1 :** Untreated HUVEC (human umbilical vein endothelial cell line) whole cell lysate

Lane 2: HUVEC (human umbilical vein endothelial cell line) treated with 10 ng/ml VEGF for 5 min, whole cell 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

Developed using the ECL technique.

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

Exposure time: 3 minutes

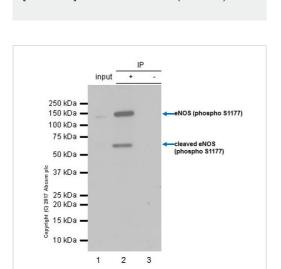
Blocking/Dilution buffer: 5% NFDM/TBST.

The 60 kDa band may be a cleaved form of eNOS (PMID: 16195740).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab215717).



Dot Blot - Anti-eNOS (phospho S1177) antibody [EPR20991] - BSA and Azide free (ab230158)



Immunoprecipitation - Anti-eNOS (phospho S1177) antibody [EPR20991] - BSA and Azide free (ab230158)

Dot blot analysis of eNOS (phospho S1177) labeled with **ab215717** at 1/1000 dilution.

Lane 1: eNOS (phospho S1177) peptide.

Lane 2: eNOS non-phospho peptide.

Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution was used as secondary antibody.

Exposure time: 1 minute.

Blocking/Dilution buffer: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab215717).

eNOS (phospho S1177) was immunoprecipitated from 0.35 mg of HUVEC (human umbilical vein endothelial cell line) treated with 10 ng/ml VEGF for 5 min, whole cell lysate with <u>ab215717</u> at 1/30 dilution. Western blot was performed from the immunoprecipitate using <u>ab215717</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

**Lane 1:** HUVEC treated with VEGF whole cell lysate 10 μg (Input). **Lane 2:** <u>ab215717</u> IP in HUVEC treated with VEGF whole cell lysate.

**Lane 3:** Rabbit monoclonal lgG (<u>ab172730</u>) instead of <u>ab215717</u> in HUVEC treated with VEGF whole cell lysate.

Exposure time: 30 seconds.

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

The 60 kDa band may be a cleaved form of eNOS (PMID: 16195740).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and



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