# abcam

## Product datasheet

## Anti-eNOS antibody ab5589

★★★★★ 8 Abreviews 110 References 4 图像

概述

产品名称 Anti-eNOS抗体

描述 兔多克隆抗体to eNOS

**宿主** Rabbit

特异性 This antibody does not detect human inducible NOS or rat brain nNOS. ab5589 has been

successfully used in Western blot and immunohistochemistry (paraffin and frozen) procedures. By

Western blot, this antibody detects an ~140 kDa protein representing eNOS from human

 $end othelial\ cells.\ Immunohistochemical\ staining\ of\ eNOS\ in\ Human\ vascular\ end othelial\ cells\ with$ 

ab5589 results in prominent staining of the epithelial cells.

**适用于:** IHC-P, WB

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide corresponding to Human eNOS aa 1179-1194.

Sequence:

SLQERQLRGAVPWAFD

Run BLAST with
Run BLAST with

**阳性**对照 IHC-P: Human lung, placenta and spleen tissues. WB: HUVEC and RAW 264.7 cell lysates; Rat

and mouse placenta tissues.

常规说明 We have received mixed feedback from customers regarding rat specificity; this is why we are

temporarily removing Rat from tested species list and no longer guarantee it. Our laboratory is currently testing new lots so please contact our scientific support team (technical@abcam.com)

for more information.

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

性能

形式 Liquid

1

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 99% PBS

纯**度** Immunogen affinity purified

**克隆** 多克隆

同种型 lgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab5589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
IHC-P		1/100. Antigen retrieval is not essential but may optimise staining.
WB	★ ★ ★ ★ ★ (5)	1/1000. Predicted molecular weight: 133 kDa.  By Western blot ab5589 also detects eNOS in canine cardiac microsomes.  5% BSA in TBST is recommended as blocking buffer.

#### 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 <b>特异性</b>	Platelets, placenta, liver and kidney.	
疾病相关	Variation in NOS3 seem to be associated with susceptibility to coronary spasm.	
c 되 to /u 사	Delegans to the NOC femily	

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

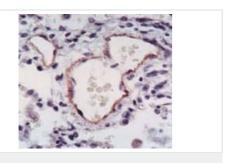
inhibition of activity (By similarity). Phosphorylation of Ser-114 by CDK5 reduces activity.

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

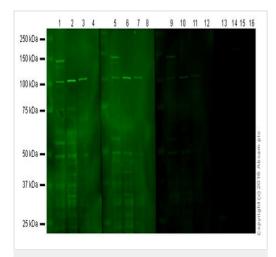
interaction with NOSIP and results in a reduced enzymatic activity.

## 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-eNOS antibody (ab5589)

Immunolocalization of eNOS in human lung tissue using ab5589.



Western blot - Anti-eNOS antibody (ab5589)

Lanes 1-4: Anti-eNOS antibody (ab5589) at 1/200 dilution
Lanes 5-8: Anti-eNOS antibody (ab5589) at 1/600 dilution
Lanes 9-12: Anti-eNOS antibody (ab5589) at 1/1800 dilution
Lanes 13-16: Anti-eNOS antibody (ab5589) at 1/5400 dilution

Lane 1 : HUVEC (Human umbilical vein endothelial cell line) whole cell lysate

Lane 2: RAW 264.7 (Mouse macrophage cell line transformed

with Abelson murine leukemia virus) whole cell lysate

 $\textbf{Lanes 3 \& 7 \& 11:} \ \text{Mouse placenta tissue lysate}$ 

Lanes 4 & 8 & 12 & 16 : Rat placenta tissue lysate

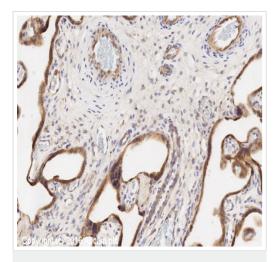
Lanes 5 & 9 & 13: HUVEC whole cell lysate

Lanes 6 & 10 & 14: RAW 264.7 whole cell lysate

Lane 15: Mouse Placenta

Lysates/proteins at 10 µg per lane.

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

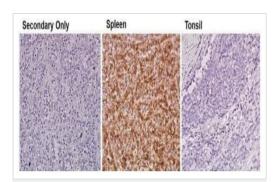


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-eNOS antibody (ab5589)

IHC image of eNOS staining in human placenta formalin fixed paraffin embedded tissue section\*, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab5589, 1/100, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-eNOS antibody (ab5589)

The specificity of ab5589 was demonstrated using naturally occurring variable expression to confirm specificity.

Immunohistochemistry analysis of human tissue sections using this antibody showed eNOS is strongly stained in human spleen tissue and no staining in human tonsil tissue which does not express eNOS.

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

## Terms and conditions

Guarantee only valid for products bought direct from Abcam or one of our authorized distributors