

## Mouse Anti-eNOS antibody

SLM-33176M

**Product Name** eNOS

**Chinese Name** 一氧化氮合成酶-3（内皮型）单克隆抗体

**Alias**

NOS-3; eNOS; Constitutive NOS; EC NOS; ecNOS; Endothelial nitric oxidase synthase; Endothelial nitric oxide synthase; Endothelial nitric oxide synthase 3; Endothelial NOS; Nitric oxide synthase 3 (endothelial cell); Nitric oxide synthase 3; Nitric oxide synthase 3 endothelial cell; Nitric oxide synthase endothelial; nitric oxide synthase, endothelial; NOS 3; NOS III; NOS type III; NOS3; NOSIII; NOS3\_HUMAN.

**Research Area**

Cell biology Neurobiology Signal transduction Synthesis and Degradation endothelial cells

**Immunogen Species**

Mouse

**Clonality**

Monoclonal

**Clone NO.**

8G1

**React Species** Mouse,Rat(predicted:Human)

**Applications**

WB=1:500-1000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500（Paraffin sections need antigen repair）  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight**

133kDa

**Cellular localization**

cytoplasmic The cell membrane

**Form**

Liquid

**Concentration** 1mg/ml

**immunogen**

KLH conjugated synthetic peptide derived from human eNos

**Lsotype**

IgG

**Purification**

affinity purified by Protein G

**Buffer Solution**

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.



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<b>Storage</b>	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
<b>Attention</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>PubMed</b>	<a href="#">PubMed</a> Nitric oxide synthase NOS oxidizes a guanidine nitrogen of arginine releasing nitric oxide in the form of a free radical and citrulline. Nitric oxide thus generated acts as a messenger in diverse functions including vasodilation neurotransmission, anti tumor and anti pathogenic activities. NOS is classified under three types: neuronal NOS (nNOS) or brain NOS (bNOS); inducible NOS (iNOS) or macrophage NOS (mNOS); and endothelial NOS (eNOS). eNOS is a calcium/calmodulin dependent enzyme which undergoes several post translational modifications, including acylation with myristate and palmitate, and phosphorylation on numerous residues. As with the other members of the NOS family, eNOS derives the diffusible multifunctional second messenger NO from L arginine through a series of reactions in which L citrulline is an intermediate. eNOS plays an important role in controlling vascular tone, platelet aggregation, and cardiac myocyte function.
<b>Product Detail</b>	<b>Function:</b> 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.  <b>Subunit:</b> Homodimer. Interacts with NOSIP and NOSTRIN.  <b>Subcellular Location:</b> Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. Note=Specifically associates with actin cytoskeleton in the G2 phase of the cell cycle; which is favored by interaction with NOSIP and results in a reduced enzymatic activity.  <b>Tissue Specificity:</b> Platelets, placenta, liver and kidney.  <b>Post-translational modifications:</b> 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. Phosphorylation of Ser-114 by CDK5 reduces activity.

**Similarity:**

Belongs to the NOS family.  
Contains 1 FAD-binding FR-type domain.  
Contains 1 flavodoxin-like domain.

**SWISS:**

P70313

**Gene ID:**

18127

**Database links:**

[Entrez Gene: 287024Cow](#)

[Entrez Gene: 4846Human](#)

[Entrez Gene: 18127Mouse](#)

[Entrez Gene: 24600Rat](#)

[Omim: 163729Human](#)

[SwissProt: P29473Cow](#)

[SwissProt: P29474Human](#)

[SwissProt: P70313Mouse](#)

[SwissProt: Q62600Rat](#)

[Unigene: 647092Human](#)

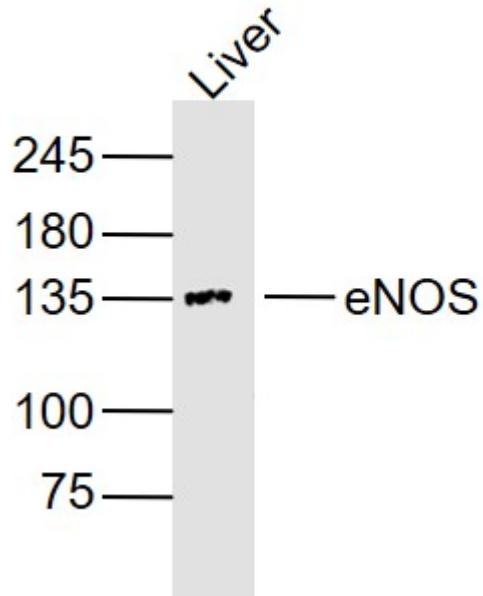
[Unigene: 258415Mouse](#)

[Unigene: 44265Rat](#)

**Synthesis and Degradation (Synthesis and Degradation)**

催化生物体内一氧化氮(NO)生成的酶。分神经型一氧化氮合成的酶(nNOS or NOS-1)、诱导型一氧化氮合成的酶(iNOS or NOS-2)、内皮型一氧化氮合成的酶(eNOS or NOS-3)。此抗体识别分子量为 135kDa 的内皮型一氧化氮合成的酶。

**Product  
Picture**



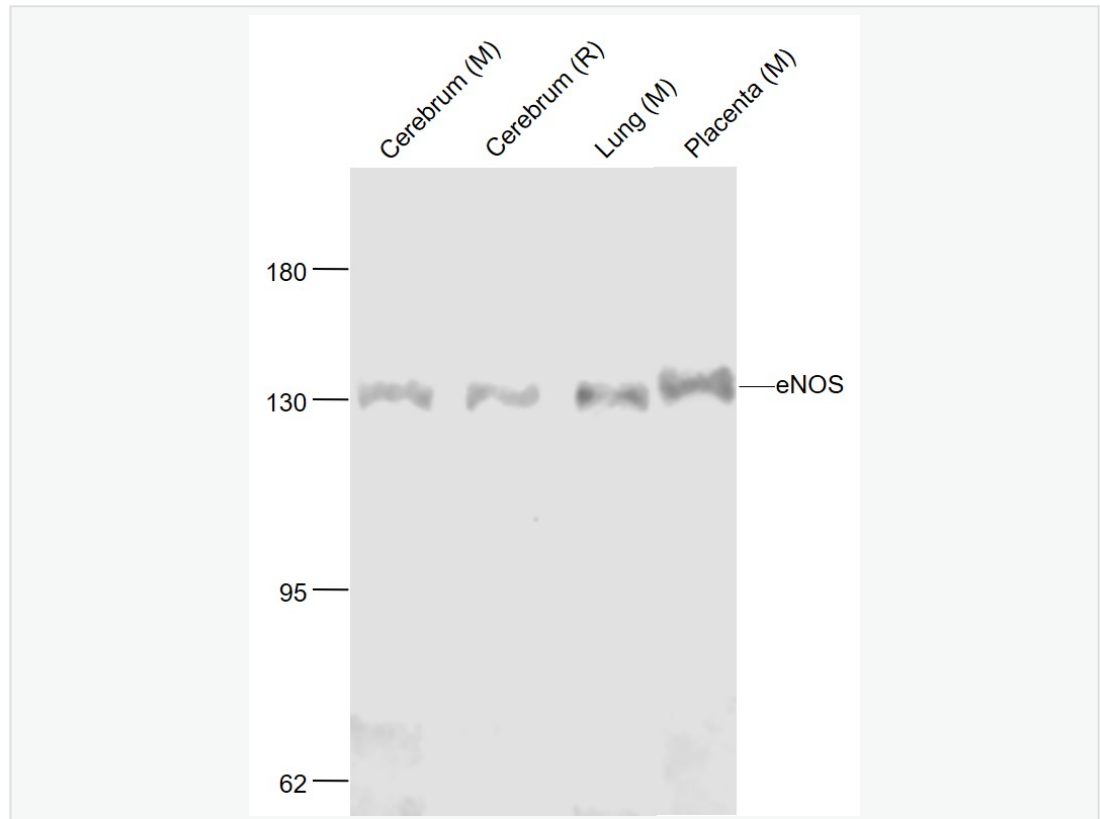
Sample: Liver(mouse) Lysate at 40 ug

Primary: Anti-eNOS (SLM-33176M)at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 133kD

Observed band size: 135kD



Sample:

Cerebrum (Mouse) Lysate at 40 ug

Cerebrum (Rat) Lysate at 40 ug

Lung (Mouse) Lysate at 40 ug

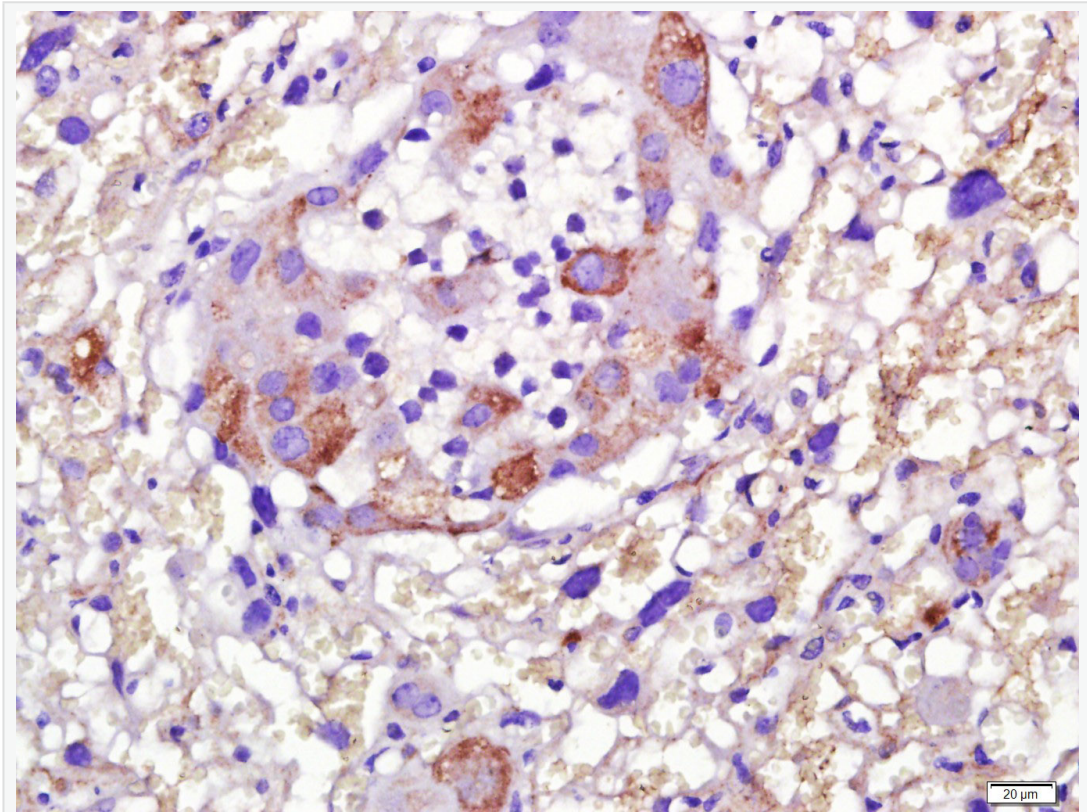
Placenta (Mouse) Lysate at 40 ug

Primary: Anti-eNOS (SLM-33176M) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti- Mouse IgG at 1/20000 dilution

Predicted band size: 135 kD

Observed band size: 135 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse placenta); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (eNOS/NOS-3) Monoclonal Antibody, Unconjugated (SLM-33176M) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.