

Anti-Phospho-eNOS (S1177) Antibody [PS01-10]

HA721188



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Dog, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 133 kDa
Clone number:	PS01-10

Description: Endothelial NOS (eNOS), also known as nitric oxide synthase 3 (NOS3) or constitutive NOS (cNOS), is an enzyme that in humans is encoded by the NOS3 gene located in the 7q35-7q36 region of chromosome 7. This enzyme is one of three isoforms that synthesize nitric oxide (NO), a small gaseous and lipophilic molecule that participates in several biological processes. The other isoforms include neuronal nitric oxide synthase (nNOS), which is constitutively expressed in specific neurons of the brain[8] and inducible nitric oxide synthase (iNOS), whose expression is typically induced in inflammatory diseases. eNOS is primarily responsible for the generation of NO in the vascular endothelium, a monolayer of flat cells lining the interior surface of blood vessels, at the interface between circulating blood in the lumen and the remainder of the vessel wall. NO produced by eNOS in the vascular endothelium plays crucial roles in regulating vascular tone, cellular proliferation, leukocyte adhesion, and platelet aggregation. Therefore, a functional eNOS is essential for a healthy cardiovascular system.

Immunogen: Synthetic phosphopeptide corresponding to residues surrounding Ser1177 of human eNOS.

Positive control: HAEC serum starved then treated with 100nM Insulin for 1 hour cell lysate, human placenta tissue.

Subcellular location: Cell membrane, Membrane, caveola, Cytoplasm, cytoskeleton, Golgi apparatus.

Database links: SwissProt: P29474 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:200

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

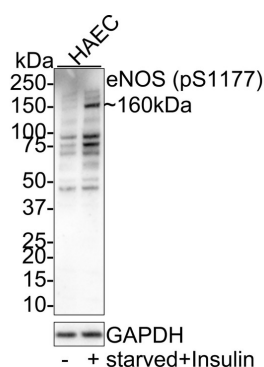


Fig1: Western blot analysis of Phospho-eNOS (S1177) on different lysates with Rabbit anti-Phospho-eNOS (S1177) antibody (HA721188) at 1/1,000 dilution.

Lane 1: HAEC cell lysate

Lane 2: HAEC serum starved then treated with 100nM Insulin for 1 hour cell lysate

Lysates/proteins at 30 µg/Lane.

Predicted band size: 133 kDa

Observed band size: 160 kDa

Exposure time: 2 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721188) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

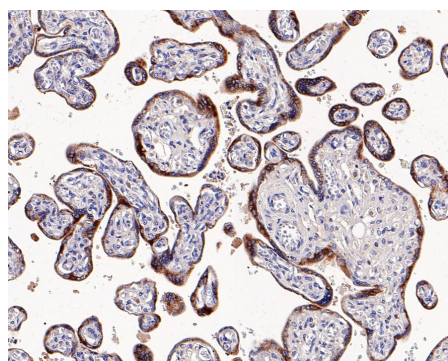


Fig2: Immunohistochemical analysis of paraffin-embedded human placenta tissue with Rabbit anti-Phospho-eNOS (S1177) antibody (HA721188) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721188) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Jin YJ et al. Protein kinase N2 mediates flow-induced endothelial NOS activation and vascular tone regulation. J Clin Invest. 2021 Nov
2. Hebbel RP et al. Multiple inducers of endothelial NOS (eNOS) dysfunction in sickle cell disease. Am J Hematol. 2021 Nov

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