

Phospho-eNOS-S1177 Rabbit mAb

Catalog NO.: AP1629 **Recombinant**

Basic Information

Observed MW

140 kDa

Calculated MW

133 kDa

Category

Monoclonal Antibodies

Applications

WB, ELISA

Cross-Reactivity

Human, Mouse

Conjugation

Unconjugated

Clone number

ARC82069

Background

Enables nitric-oxide synthase activity and scaffold protein binding activity. Involved in several processes, including heart development; negative regulation of muscle hyperplasia; and smooth muscle hyperplasia. Acts upstream of with a positive effect on positive regulation of gene expression. Acts upstream of or within several processes, including lipopolysaccharide-mediated signaling pathway; nitric oxide biosynthetic process; and regulation of metal ion transport. Located in cytoplasm and nucleus. Is expressed in several structures, including alimentary system; cardiovascular system; genitourinary system; hemolymphoid system gland; and nervous system. Used to study aortic valve disease; essential hypertension; persistent fetal circulation syndrome; and type 2 diabetes mellitus. Human ortholog(s) of this gene implicated in several diseases, including artery disease (multiple); eye disease (multiple); leukemia (multiple); reproductive organ cancer (multiple); and vasculitis (multiple). Orthologous to human NOS3 (nitric oxide synthase 3). The two most thoroughly studied sites are the activation site Ser1177 and the inhibitory site Thr495 . Several protein kinases including Akt/PKB, PKA, and AMPK activate eNOS by phosphorylating Ser1177 in response to various stimuli . In contrast, bradykinin and H2O2 activate eNOS activity by promoting both Ser1177 phosphorylation and Thr495 dephosphorylation.

Recommended Dilutions

WB 1:4000 - 1:20000

ELISA

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000), a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID	Swiss Prot
18127	P70313

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

2310065A03Rik; Nos-3; eNOS; ecNOS

Contact

Product Information

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☒		service@abclonal.com
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Source

Rabbit

Isotype

IgG

Purification

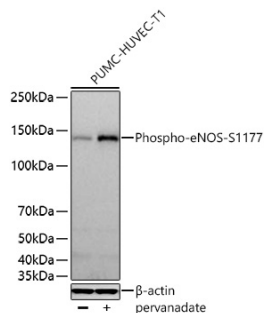
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH 7.3.

Validation Data



Western blot analysis of lysates from PUMC-HUVEC-T1 cells using Phospho-eNOS-S1177 Rabbit mAb (AP1629) at 1:8000 dilution incubated overnight at 4°C. PUMC-HUVEC-T1 cells were treated with pervanadate (100 μ M) at 37°C for 10 minutes.

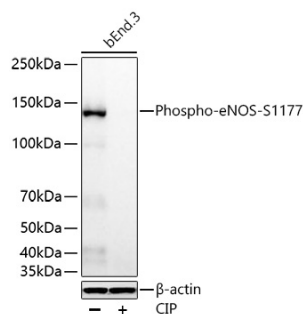
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 30 μ g per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 5 s.



Western blot analysis of lysates from bEnd.3 cells using Phospho-eNOS-S1177 Rabbit mAb (AP1629) at 1:8000 dilution incubated overnight at 4°C. bEnd.3 cells treated with CIP (1 U/ μ L) at 37°C for 1 hour.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 30 μ g per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 60 s.

