

## eNOS (phospho Ser1177) Polyclonal Antibody

Catalog No: YP0514

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IF;ELISA

Target: NOS3

**Fields:** >>Arginine biosynthesis;>>Arginine and proline metabolism;>>Metabolic

pathways;>>Calcium signaling pathway;>>cGMP-PKG signaling

pathway;>>HIF-1 signaling pathway;>>Sphingolipid signaling pathway;>>PI3K-

Akt signaling pathway;>>VEGF signaling pathway;>>Apelin signaling pathway;>>Platelet activation;>>Estrogen signaling pathway;>>Oxytocin signaling pathway;>>Relaxin signaling pathway;>>Insulin resistance;>>AGE-

RAGE signaling pathway in diabetic complications;>>Diabetic

cardiomyopathy;>>Lipid and atherosclerosis;>>Fluid shear stress and

atherosclerosis

Gene Name: NOS3

**Protein Name:** Nitric oxide synthase endothelial

P29474

P70313

Human Gene Id: 4846

**Human Swiss Prot** 

No:

Mouse Gene Id: 18127

**Mouse Swiss Prot** 

No:

Rat Gene Id: 24600

Rat Swiss Prot No: Q62600

Immunogen: The antiserum was produced against synthesized peptide derived from human

eNOS around the phosphorylation site of Ser1176. AA range:1144-1193

**Specificity:** Phospho-NOS3 (S1177) Polyclonal Antibody detects endogenous levels of

NOS3 protein only when phosphorylated at S1177.



**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other

applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 130-140kD

Cell Pathway: Regulates Angiogenesis; AMPK; PI3K/Akt; Protein Acetylation

**Background:** Nitric oxide is a reactive free radical which acts as a biologic mediator in several

processes, including neurotransmission and antimicrobial and antitumoral activities. Nitric oxide is synthesized from L-arginine by nitric oxide synthases. Variations in this gene are associated with susceptibility to coronary spasm. Multiple transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, May 2009],

Function: catalytic activity:L-arginine + n NADPH + n H(+) + m O(2) = citrulline + nitric

oxide + n NADP(+).,cofactor:Binds 1 FAD.,cofactor:Binds 1 FMN.,cofactor:Heme group.,cofactor:Tetrahydrobiopterin (BH4). May stabilize the dimeric form of the enzyme.,enzyme regulation:Stimulated by calcium/calmodulin. Inhibited by

NOSIP and NOSTRIN.,function: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., online information: Nitric oxide synthase

entry,polymorphism:Variation in NOS3 seem to be associated with susceptibility to coronary spasm.,similarity:Belongs to the NOS family.,similarity:Contains 1

FAD-binding FR-type domain., similarity: Contains 1 flavodoxin-like

Subcellular Location:

Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. 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.

**Expression :** Platelets, placenta, liver and kidney.

Tag: orthogonal,hot

2/5



Sort: 1

No2: 9570S

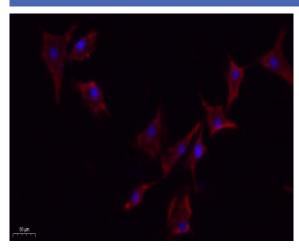
**No3:** ab215717

**No4:** 1

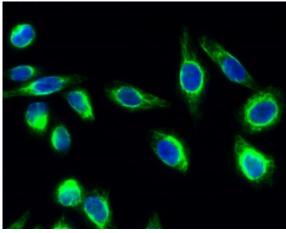
Host: Rabbit

Modifications : Phospho

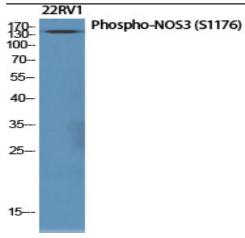
## **Products Images**



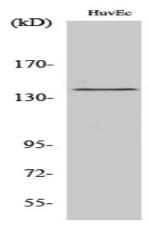
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



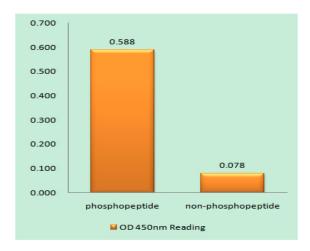
Immunofluorescence analysis of Hela cell. 1,NOS3 (phospho Ser1177) Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



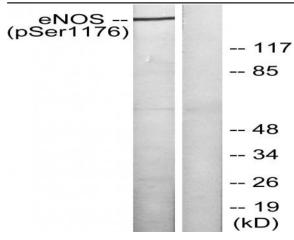
Western Blot analysis of various cells using Phospho-NOS3 (S1177) Polyclonal Antibody diluted at 1:1000



Western Blot analysis of HuvEc cells using Phospho-NOS3 (S1177) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using eNOS (Phospho-Ser1176) Antibody



Western blot analysis of lysates from HeLa cells treated with Insulin 0.01U/ml 15', using eNOS (Phospho-Ser1176) Antibody. The lane on the right is blocked with the phospho peptide.