

eNOS (phospho Thr494) Polyclonal Antibody

Catalog No: YP0196

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA

Target: NOS3/eNOS

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 ld: 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 Thr494. AA range:462-511

Specificity: Phospho-NOS3 (T494) Polyclonal Antibody detects endogenous levels of NOS3

protein only when phosphorylated at T494.



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. ELISA: 1:5000. 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.

Sort : 590



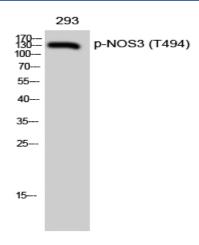
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No4: 1

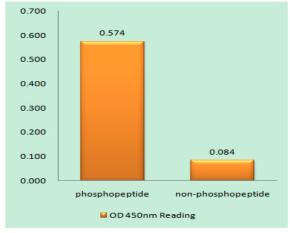
Host: Rabbit

Modifications: Phospho

Products Images

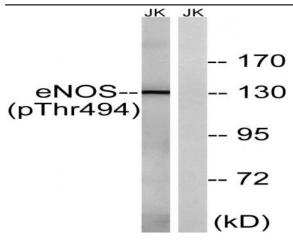


Western Blot analysis of 293 cells using Phospho-NOS3 (T494) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using eNOS (Phospho-Thr494) Antibody

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Western blot analysis of lysates from Jurkat cells, using eNOS (Phospho-Thr494) Antibody. The lane on the right is blocked with the phospho peptide.