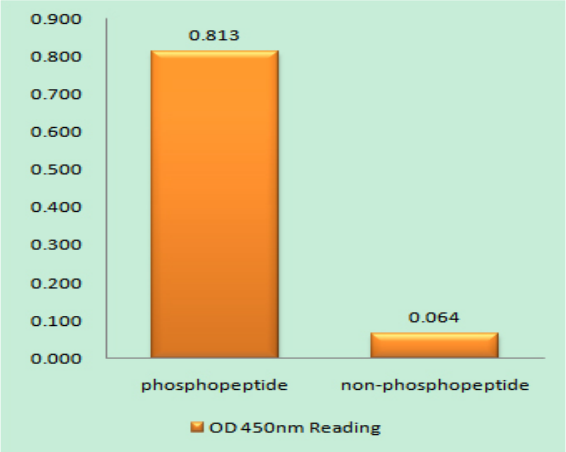
Best Tools for immunology Research

eNOS (phospho Ser615) Polyclonal Antibody

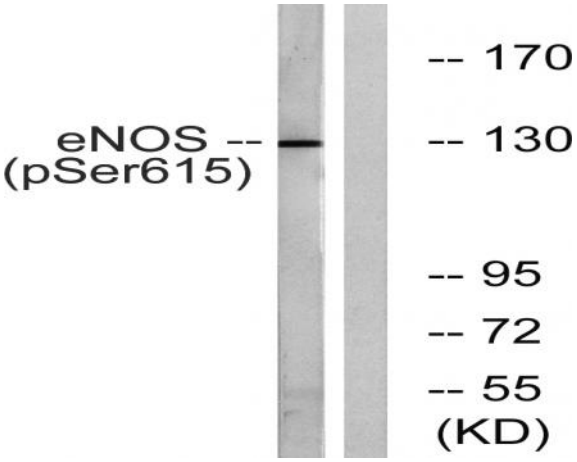
Catalog No :	YP0381
Reactivity :	Human;Mouse;Rat
Applications :	WB;ELISA
Target :	NOS3
Fields :	>>Arginine biosynthesis;>>Arginine and proline metabolism;>>Metabolic pathways;>>Calcium signaling pathway;>>cGMP-PKG signaling pathway;>>HIF-1 signaling pathway;>>Sphingolipid signaling pathway;>>PI3K-Akt 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
Human Gene Id :	4846
Human Swiss Prot No :	P29474
Mouse Gene Id :	18127
Mouse Swiss Prot No :	P70313
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 Ser615. AA range:581-630
Specificity :	Phospho-NOS3 (S615) Polyclonal Antibody detects endogenous levels of NOS3 protein only when phosphorylated at S615.

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: 1:40000. 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; Akt_PKB; 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.

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using eNOS (Phospho-Ser615) Antibody



Western blot analysis of lysates from K562 cells treated with EGF 40nM 30', using eNOS (Phospho-Ser615) Antibody. The lane on the right is blocked with the phospho peptide.