

Product name:	NOS3 (phospho Thr494) Rabbit Polyclonal Antibody
Cat number:	ABN05124
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human eNOS around the phosphorylation site of Thr494. AA range:462-511
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,ELISA 1:5000-1:10000
Molecular Weight:	130-140kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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], 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 domain, subcellular location: 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, subunit: Homodimer. Interacts with NOSIP and NOSTRIN, tissue specificity: Platelets, placenta, liver and kidney.