

Rabbit eNOS Polyclonal Antibody | anti-eNOS antibody

eNOS (Tyr-657)/nNOS (Tyr-895), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71675	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

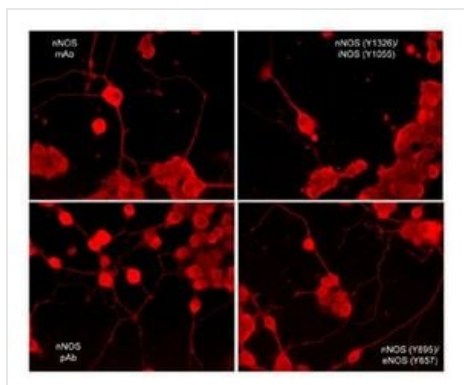
PRODUCT SYNONYMS

eNOS; Polyclonal Antibody; eNOS (Tyr-657)/nNOS (Tyr-895); phospho-specific Antibody; phospho-specific; NOSe 0657; anti-eNOS antibody

PRODUCT SPECIFICATIONS

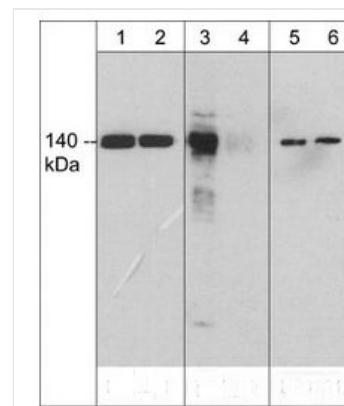
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	The antibody detects a 140kDa* band on SDS-PAGE immunoblots of human umbilical vein endothelial cells treated with pervanadate, and this reactivity is not observed after alkaline phosphatase treatment.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-eNOS antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-eNOS (Tyr-657) synthetic peptide (coupled to carrier protein) corresponding to amino acids surrounding tyrosine 657 in human eNOS. This sequence is conserved in mouse (Tyr-656) and rat (Tyr-656) eNOS, and is identical to the conserved site in nNOS (Tyr-895). The site is also well conserved in iNOS (Tyr-631).
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of nNOS phosphorylation in rat PC12 cells differentiated with NGF. The cells were probed with mouse monoclonal (mAb) nNOS (NM4011), and rabbit polyclonal (pAb) nNOS (C-terminal region), nNOS (Tyr-895)/eNOS (Tyr-657), and nNOS (Tyr-1326)/iNOS (Tyr-1055). The antibodies were detected using appropriate secondary antibody conjugated to DyLight 594.



WB (Western Blot)

Western blot analysis of human umbilical vein endothelial cells stimulated with pervanadate (1mM) for 30 min. (lanes 1, 3, & 5) then the blot was treated with alkaline phosphatase (lanes 2, 4, & 6). The blots were probed with anti-eNOS monoclonal antibody (NM2211; lanes 1 & 2), anti-eNOS (Tyr-657) phospho-specific antibody (NP4031; lanes 3 & 4), or anti-eNOS polyclonal antibody (NP2281; lanes 5 & 6).

ADDITIONAL INFORMATION

Related Product Information for anti-eNOS antibody	Nitric oxide (NO) has a broad range of biological activities and is implicated in signaling pathways in phylogenetically diverse species. Nitric oxide synthases (NOS), the enzymes responsible for synthesis of NO, are homodimers whose monomers are themselves two fused enzymes: acytochrome reductase and a cytochrome that requires three cosubstrates (L-arginine, NADPH, and oxygen) and five cofactors or prosthetic groups (FAD, FMN, calmodulin, tetrahydrobiopterin, and heme). Several distinct NOS isoforms are produced from three distinct genes, inducible NOS (iNOS, NOS-II), neuronal NOS (bnOS, NOS-I), and endothelial NOS (eNOS, ecNOS, NOS-III). Regulation of eNOS activity occurs through phosphorylation at multiple sites. Phosphorylation of Ser-633 (mouse Ser-632) in the FMN binding domain increases eNOS activity and may be important for the maintenance of NO synthesis after initial activation by Ca ²⁺ flux and Ser-1177 phosphorylation. Tyr-657 is phosphorylated by PYK2 in response to fluid shear stress and this phosphorylation leads to attenuation of enzyme activity.
References	Loot, A. E. et al. (2009) J Exp Med. 206(13):2889. Fisslthaler, B. et al. (2008) Circ Res. 102:1520. Mount, P.F. et al. (2007) J Mol Cell. Cardiol. 42(2):271. Musicki, B. et al. (2005) Proc. Natl. Acad. Sci. 102(33):11870.

NCBI AND UNIPROT INFORMATION

NCBI GI #	40254422
NCBI GeneID	4846
NCBI Accession #	NP_000594.2
NCBI GenBank Nucleotide #	NM_000603.4
UniProt Accession #	P29474 ; Q13662 ; Q14251 ; Q14434 ; Q548C1 ; Q6GSL5 ; Q9UDC6 ; A0S0A7 ; A0S0A8 ; A8KA63 ; B2RCQ1 ; E9PFR2
Molecular Weight	133,289 Da
NCBI Official Full Name	nitric oxide synthase, endothelial isoform 1
NCBI Official Synonym Full Names	nitric oxide synthase 3 (endothelial cell)
NCBI Official Symbol	NOS3
NCBI Official Synonym Symbols	eNOS; ECNOS
NCBI Protein Information	nitric oxide synthase, endothelial; cNOS; EC-NOS; NOSIII; NOS type III; endothelial NOS; constitutive NOS
UniProt Protein Name	Nitric oxide synthase, endothelial
UniProt Gene Name	NOS3
UniProt Synonym Gene Names	cNOS; eNOS; NOSIII
UniProt Entry Name	NOS3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/enos-antibody-immunocytochemistry-western-blot-elisa/71675>