

Rabbit eNOS Polyclonal Antibody | anti-eNOS antibody

Phospho-eNOS (Ser1179) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31394	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Rabbit (100%), Dog (100%)	Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA

PRODUCT SYNONYMS

eNOS; Polyclonal Antibody; Phospho-eNOS (Ser1179) Antibody; cNOS; Constitutive NOS; EC NOS; EC-NOS; ecNOS; Endothelial nitric oxidase synthase; Endothelial nitric oxide synthase; Endothelial nitric oxide synthase 3; Endothelial NOS; Nitric oxide synthase 3 (endothelial cell); Nitric oxide synthase 3; Nitric oxide synthase 3 endothelial cell; Nitric oxide synthase endothelial; Nitric oxide synthase; endothelial; NOS 3; NOS III; NOS type III; NOS3; NOS3_HUMAN; NOSIII; anti-eNOS antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Rabbit (100%), Dog (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-eNOS (Ser1179) Antibody detects endogenous levels of eNOS only when phosphorylated at Ser1179. Tissue Specificity: Platelets, placenta, liver and kidney.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-eNOS antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA (Peptide ELISA)
Application Notes	WB: 1:1000-3000 IHC: 1:50-1:200 IF/ICC: 1:100-1:500 Peptide ELISA: 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human eNOS around the phosphorylation site of Ser1179.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Phosphorylation by AMPK at Ser-1177 in the presence of Ca (2+)-calmodulin (CaM) activates activity. In absence of Ca (2+)-calmodulin, AMPK also phosphorylates Thr-495, resulting in inhibition of activity (By similarity). Phosphorylation of Ser-114 by CDK5 reduces activity.
Subunit Structure	Homodimer. Interacts with NOSIP and NOSTRIN. Interacts with HSP90AB1.
Similarity	Belongs to the NOS family.
Subcellular Location	Cell membrane. Membrane>Caveola. Cytoplasm>Cytoskeleton. Golgi apparatus. Note: 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.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data

At 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/200 staining Human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/200 staining Mouse kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/200 staining Rat kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of eNOS (Phospho-Ser1179) using UV treated HeLa whole cell lysates. - /+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).



WB (Western Blot)

Western blot analysis of eNOS (Phospho-Ser1179) using H2O2 treated HuvEc whole cell lysatesLanes 1 - 2: Merged signal (red and green). Green - AF8086 observed at 140 kDa. Red - loading control, T0022, observed at 43 kDa.Blots were developed with Goat Anti-Rabbit IgG(H+L) FITC €"conjugated (S0008) and Goat Anti-Mouse IgG(H+L) Alexa Fluor 594 €"conjugated (S0006) secondary antibodies

ADDITIONAL INFORMATION

Related Product Information for anti-eNOS antibody

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.Lacks eNOS activity, dominant-negative form that may down-regulate eNOS activity by forming heterodimers with isoform 1.

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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