

**Anti-eNOS (Tyr-657)/nNOS (Tyr-895), Phosphospecific Antibody**  
**Catalog # AN1865****Specification****Anti-eNOS (Tyr-657)/nNOS (Tyr-895), Phosphospecific Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P29474</a>
Reactivity	Bovine
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	133275

**Anti-eNOS (Tyr-657)/nNOS (Tyr-895), Phosphospecific Antibody - Additional Information**

Gene ID **4846**  
**Other Names**  
endothelial Nitric Oxide Synthase, eNOS, ecNOS, NOS-III, NOS3, NOSIII

**Dilution**  
WB~~1:1000

**Storage**  
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

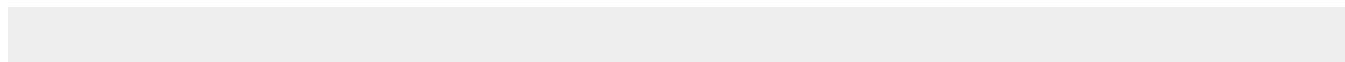
**Precautions**  
Anti-eNOS (Tyr-657)/nNOS (Tyr-895), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

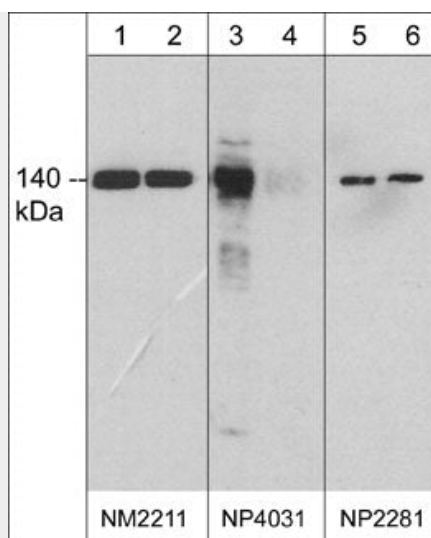
**Shipping**  
Blue Ice

**Anti-eNOS (Tyr-657)/nNOS (Tyr-895), Phosphospecific Antibody - Protocols**

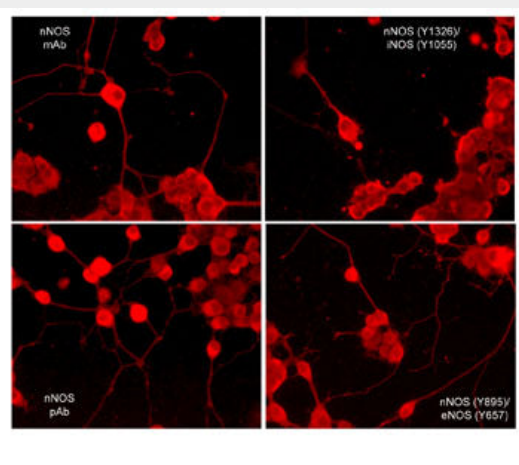
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-eNOS (Tyr-657)/nNOS (Tyr-895), Phosphospecific Antibody - Images**



Western blot analysis of human umbilical vein endothelial cells stimulated with pervanadate (1 mM) 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).



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.

### Anti-eNOS (Tyr-657)/nNOS (Tyr-895), Phosphospecific Antibody - Background

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: a cytochrome 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. The inducible form of NOS, iNOS (NOS-II), is Ca<sup>2+</sup> independent and is expressed in a broad range of cell types, and two constitutive Ca<sup>2+</sup>/CaM-dependent forms of NOS: nNOS (bNOS, NOS-I) identified in neurons and eNOS (ecNOS, NOS-III) identified in endothelial cells. 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  $\text{Ca}^{2+}$  flux and Ser-1177 phosphorylation.