

# Anti-eNOS (Ser-632), Phosphospecific Antibody

Catalog # AN1864

## Product Information

<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P70313</a>
<b>Host</b>	Mouse
<b>Clonality</b>	Mouse Monoclonal
<b>Isotype</b>	IgG1
<b>Clone Names</b>	M232
<b>Calculated MW</b>	132916

## Additional Information

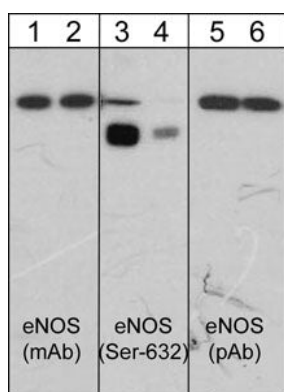
<b>Gene ID</b>	18127
<b>Other Names</b>	endothelial Nitric Oxide Synthase, eNOS, ecNOS, NOS-III, NOS3, NOSIII
<b>Dilution</b>	WB~~1:1000
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Anti-eNOS (Ser-632), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
<b>Shipping</b>	Blue Ice

## 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 Ca<sup>2+</sup> flux and Ser-1177 phosphorylation.

## Images

Western blot analysis of human umbilical vein endothelial cells stimulated with Calyculin A and untreated (lanes 1, 3, 5) or treated (lanes 2, 4, 6) with lambda phosphatase.



The blots were probed with anti-endothelial Nitric Oxide Synthase (eNOS) monoclonal antibody (lanes 1 & 2), anti-eNOS (Ser-632) phospho-specific antibody (lanes 3 & 4), and anti-eNOS polyclonal antibody (lanes 5 & 6).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.