

Anti-eNOS (Ser-1177), Phosphospecific Antibody
Catalog # AN1866**Specification****Anti-eNOS (Ser-1177), Phosphospecific Antibody - Product Information**

Primary Accession	P29474
Reactivity	Bovine
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	133275

Anti-eNOS (Ser-1177), Phosphospecific Antibody - Additional Information

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

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 (Ser-1177), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

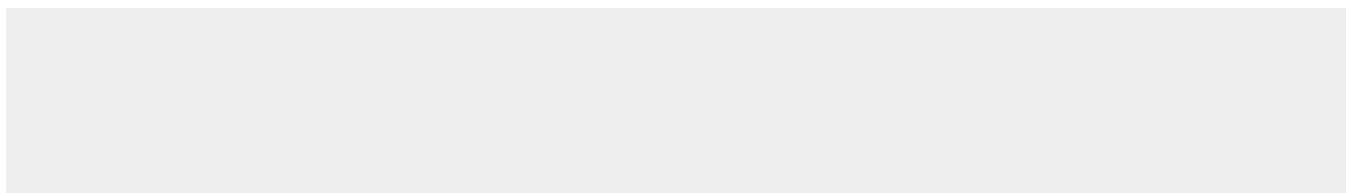
Shipping

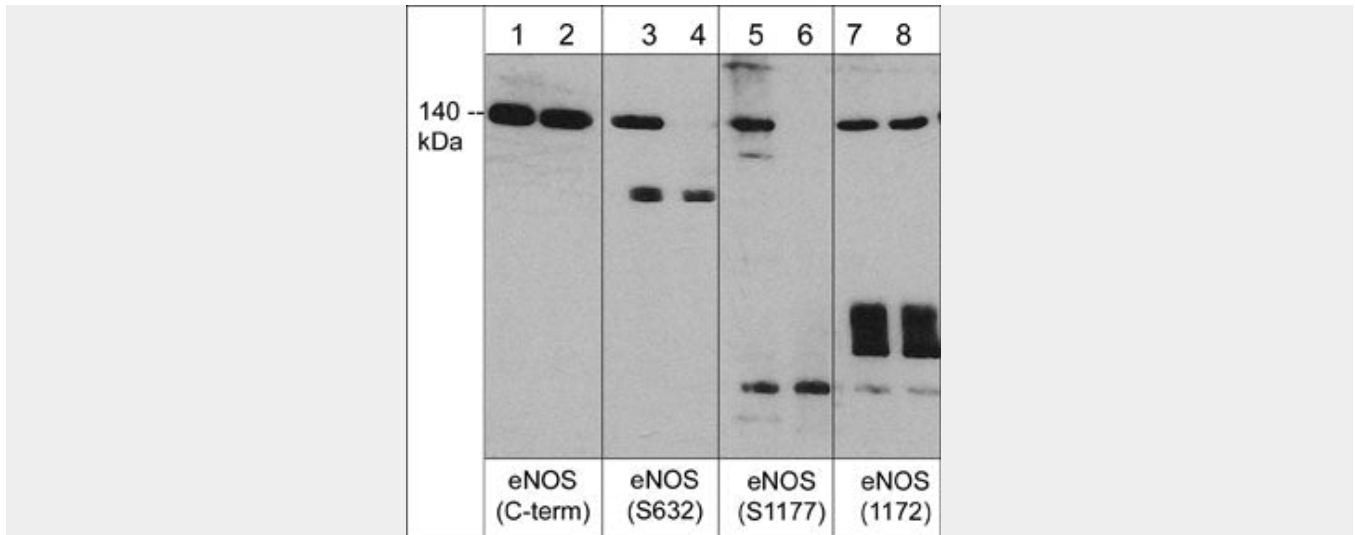
Blue Ice

Anti-eNOS (Ser-1177), 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 (Ser-1177), Phosphospecific Antibody - Images



Western blot analysis of human umbilical vein endothelial cells treated with calyculin A (100 nM) for 30 min. (lanes 1, 3, 5, & 7) then the blots were treated with lambda phosphatase (lanes 2, 4, 6, & 8). The blots were probed with anti-endothelial nitric oxide synthase (eNOS) (C-terminal region) (lanes 1 & 2), anti-eNOS (Ser-632) (lanes 3 & 4), anti-eNOS (Ser-1177) (lanes 5 & 6), or anti-eNOS (a.a. 1172-1181) (lanes 7 & 8).

Anti-eNOS (Ser-1177), 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 Ca²⁺ independent and is expressed in a broad range of cell types, and two constitutive Ca²⁺/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 Ca²⁺ flux and Ser-1177 phosphorylation.