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Anti-eNOS (C-terminal region) Antibody

Catalog # AN1861

Product Information

Application	WB, IHC, ICC
Primary Accession	P70313
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M221
Calculated MW	132916

Additional Information

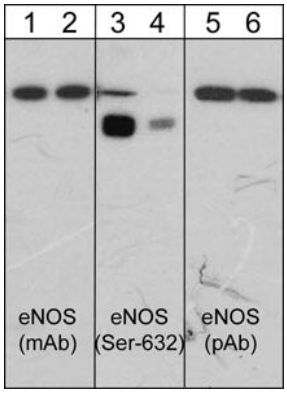
Gene ID	18127
Other Names	endothelial Nitric Oxide Synthase, eNOS, ecNOS, NOS-III, NOS3, NOSIII
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-eNOS (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

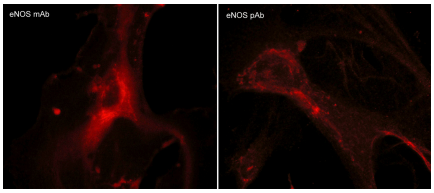
Nitric oxide (NO) has a broad range of biological activities and is implicated in signaling pathways in phylogenetically diverse species. Nitric oxide synthases (NOS), the enzymes responsible for synthesis of NO, are homodimers whose monomers are themselves two fused enzymes: a cytochrome reductase and 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 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.

Images

Western blot analysis of human umbilical vein endothelial cells before (lanes 1, 3, 5) and after (lanes 2, 4, 6) treatment 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).



Immunocytochemical labeling of endothelial nitric oxide synthase (eNOS) in paraformaldehyde-fixed and NP-40-permeabilized human umbilical vein endothelial cells. The cells were labeled with mouse monoclonal eNOS (AN1861) and rabbit polyclonal eNOS (NP2281) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.