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Product datasheet for TA389169

NOS3 Mouse Antibody [Clone ID: M221]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M221
Applications:	ICC, IHC, WB
Recommended Dilution:	**WB**: 1:1000 **ICC**: 1:50
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone (M221) was generated from a recombinant mouse eNOS protein that included amino acids residues in the C-terminal region. This sequence is conserved in human and rat eNOS, and has low homology to other NOS family members.
Specificity:	The antibody detects a 140 kDa* protein corresponding to eNOS on SDS-PAGE immunoblots of human umbilical vein endothelial cells.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	140
Database Link:	P29474

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.

Note: Protein G purified tissue culture supernatant.