

eNOS Monoclonal Antibody

Catalog No :	YM0480
Reactivity :	Human
Applications :	IHC;IF;ELISA
Target :	NOS3/eNOS
Fields :	>>Arginine biosynthesis;>>Arginine and proline metabolism;>>Metabolic pathways;>>Calcium signaling pathway;>>cGMP-PKG signaling pathway;>>HIF-1 signaling pathway;>>Sphingolipid signaling pathway;>>PI3K-Akt signaling pathway;>>VEGF signaling pathway;>>Apelin signaling pathway;>>Platelet activation;>>Estrogen signaling pathway;>>Oxytocin signaling pathway;>>Relaxin signaling pathway;>>Insulin resistance;>>AGE-RAGE signaling pathway in diabetic complications;>>Diabetic cardiomyopathy;>>Lipid and atherosclerosis;>>Fluid shear stress and atherosclerosis
Gene Name :	NOS3
Protein Name :	Nitric oxide synthase, endothelial
Human Gene Id :	4846
Human Swiss Prot No :	P29474
Mouse Swiss Prot No :	P70313
Immunogen :	Purified recombinant fragment of human NOS3 expressed in E. Coli.
Specificity :	NOS3 Monoclonal Antibody detects endogenous levels of NOS3 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200 Affinity purification

Storage Stability : -15°C to -25°C/1 year (Do not lower than -25°C)

Observed Band : 130-140kD

Cell Pathway : Regulates Angiogenesis; AMPK; PI3K/Akt; Protein_Acetylation

P References :

1. Nature. 1999 Jun 10;399(6736):601-5.
2. Oncol Rep. 2004 Nov;12(5):1007-11.
3. Breast Cancer Res Treat. 2008 May;109(1):181-2.

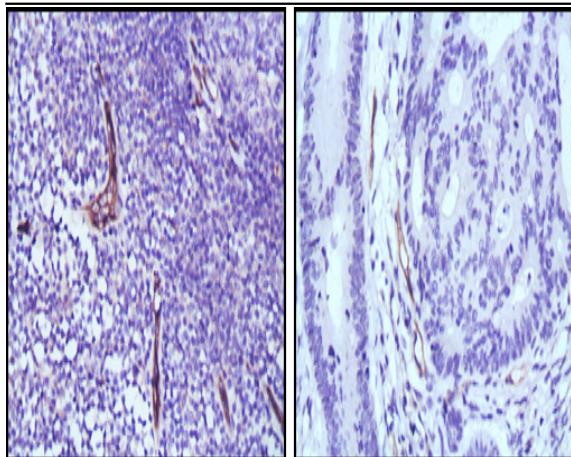
Background : Nitric oxide is a reactive free radical which acts as a biologic mediator in several processes, including neurotransmission and antimicrobial and antitumoral activities. Nitric oxide is synthesized from L-arginine by nitric oxide synthases. Variations in this gene are associated with susceptibility to coronary spasm. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009],

Function : catalytic activity:L-arginine + n NADPH + n H(+) + m O(2) = citrulline + nitric oxide + n NADP(+).,cofactor:binds 1 FAD.,cofactor:binds 1 FMN.,cofactor:heme group.,cofactor:tetrahydrobiopterin (BH4). May stabilize the dimeric form of the enzyme.,enzyme regulation:stimulated by calcium/calmodulin. inhibited by NOSIP and NOSTRIN.,function:produces nitric oxide (NO) which is implicated in vascular smooth muscle relaxation through a cGMP-mediated signal transduction pathway. NO mediates vascular endothelial growth factor (VEGF)-induced angiogenesis in coronary vessels and promotes blood clotting through the activation of platelets.,online information:nitric oxide synthase entry,polymorphism:variation in NOS3 seem to be associated with susceptibility to coronary spasm.,similarity:belongs to the NOS family.,similarity:contains 1 FAD-binding FR-type domain.,similarity:contains 1 flavodoxin-like

Subcellular Location : Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. Specifically associates with actin cytoskeleton in the G2 phase of the cell cycle; which is favored by interaction with NOSIP and results in a reduced enzymatic activity.

Expression : Platelets, placenta, liver and kidney.

Products Images



Immunohistochemistry analysis of paraffin-embedded human lymph node (left) and colon cancer (right) tissues with DAB staining using NOS3 Monoclonal Antibody.