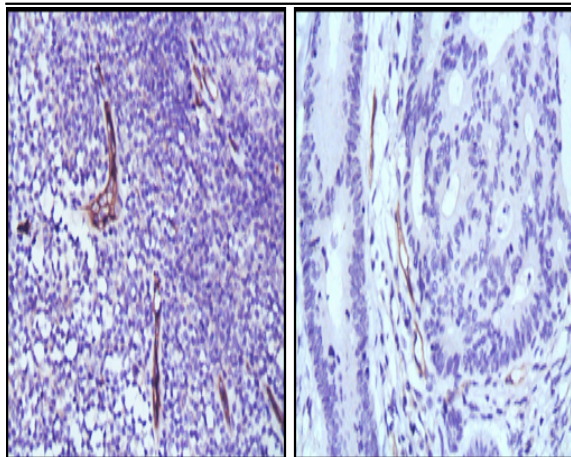


## eNOS Monoclonal Antibody

<b>Catalog No :</b>	YM0480
<b>Reactivity :</b>	Human
<b>Applications :</b>	IHC;IF;ELISA
<b>Target :</b>	NOS3/eNOS
<b>Fields :</b>	>>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
<b>Gene Name :</b>	NOS3
<b>Protein Name :</b>	Nitric oxide synthase, endothelial
<b>Human Gene Id :</b>	4846
<b>Human Swiss Prot No :</b>	P29474
<b>Mouse Swiss Prot No :</b>	P70313
<b>Immunogen :</b>	Purified recombinant fragment of human NOS3 expressed in E. Coli.
<b>Specificity :</b>	NOS3 Monoclonal Antibody detects endogenous levels of NOS3 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
	Affinity purification

<b>Storage Stability :</b>	-15°C to -25°C/1 year (Do not lower than -25°C)
<b>Observed Band :</b>	130-140kD
<b>Cell Pathway :</b>	Regulates Angiogenesis; AMPK; PI3K/Akt; Protein_Acetylation
<b>P References :</b>	<ol style="list-style-type: none"> <li>1. Nature. 1999 Jun 10;399(6736):601-5.</li> <li>2. Oncol Rep. 2004 Nov;12(5):1007-11.</li> <li>3. Breast Cancer Res Treat. 2008 May;109(1):181-2.</li> </ol>
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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</p>
<b>Subcellular Location :</b>	<p>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.</p>
<b>Expression :</b>	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.