

## **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** P29474

No:

**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



**Btorfaget®tability:** -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.

**Sort**: 591

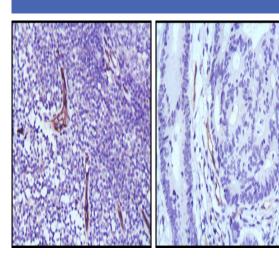
No4: 1

Host: Mouse

Modifications : Unmodified



## **Products Images**



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