10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

eNOS Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1327a

Product Information

Application	IHC, E
Primary Accession	P29474
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6H2
Isotype	IgG1
Calculated MW	133275
Description	Endothelial nitric-oxide synthase (eNOS), also known as NOS3, it is an important enzyme in the cardiovascular system. It 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.
Immunogen	Purified recombinant fragment of human eNOS expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	4846
Other Names	Nitric oxide synthase, endothelial, 1.14.13.39, Constitutive NOS, cNOS, EC-NOS, Endothelial NOS, eNOS, NOS type III, NOSIII, NOS3
Dilution	IHC~~1/200 - 1/1000 E~~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	eNOS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NOS3 (HGNC:7876)
Function	Produces nitric oxide (NO) which is implicated in vascular smooth muscle relaxation through a cGMP-mediated signal transduction pathway

	(PubMed:1378832). NO mediates vascular endothelial growth factor (VEGF)-induced angiogenesis in coronary vessels and promotes blood clotting through the activation of platelets.
Cellular Location	Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. Note=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
Tissue Location	Platelets, placenta, liver and kidney.

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.

Images

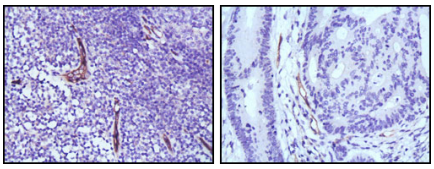

Figure 1: Immunohistochemical analysis of paraffin-embedded human lymph node (left) and colon cancer (right) tissues using eNOS mouse mAb with DAB staining.

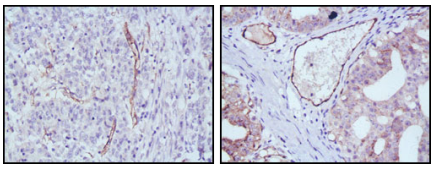

Figure 2: Immunohistochemical analysis of paraffin-embedded human stomach cancer (left) and ovary cancer (right) tissues using eNOS mouse mAb with DAB staining.

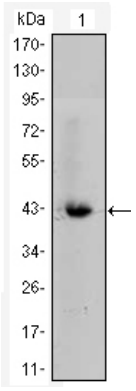

Figure 1: Western blot analysis using CTNNB1 mouse mAb against CTNNB1-hIgGFc transfected HEK293 cell lysate.

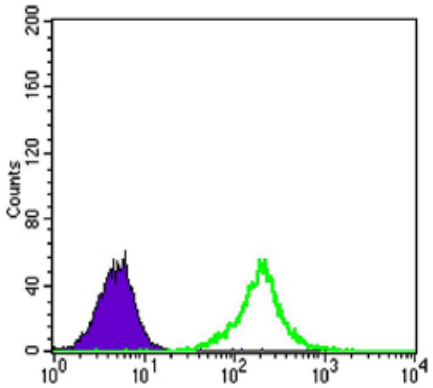

Figure 4: Flow cytometric analysis of A549 cells using CTNNB1 mouse mAb (green) and negative control (purple).

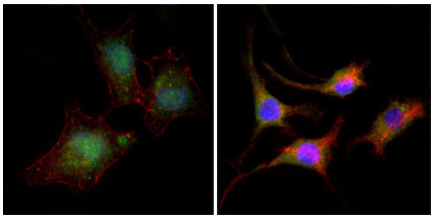

Figure 2:Immunofluorescence analysis of A549 (left) and SK-BR-3 (right) cells using anti-CTNNB1 mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.