

### NOS3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6963a

### Specification

## NOS3 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region IF, IHC-P, FC,E <u>P29474</u> <u>O28969</u>, <u>P29473</u>, <u>P79209</u> Human Bovine, Pig, Sheep Rabbit Polyclonal Rabbit IgG 48-75

## NOS3 Antibody (N-term) - Additional Information

Gene ID 4846

## **Other Names**

Nitric oxide synthase, endothelial, Constitutive NOS, cNOS, EC-NOS, Endothelial NOS, eNOS, NOS type III, NOSIII, NOS3

#### Target/Specificity

This NOS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 48-75 amino acids from the N-terminal region of human NOS3.

**Dilution** IF~~1:10~50 IHC-P~~1:10~50 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

NOS3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### NOS3 Antibody (N-term) - Protein Information

Name NOS3 (<u>HGNC:7876</u>)



**Function** Produces nitric oxide (NO) which is implicated in vascular smooth muscle relaxation through a cGMP-mediated signal transduction pathway (PubMed:<u>1378832</u>). NO mediates vascular endothelial growth factor (VEGF)-induced angiogenesis in coronary vessels and promotes blood clotting through the activation of platelets.

**Cellular Location** 

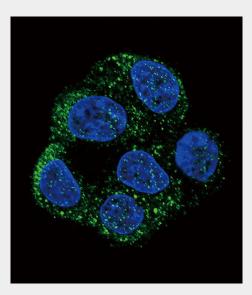
Cell membrane. Membrane, caveola. Cytoplasm, cytoskeleton. Golgi apparatus. Note=Specifically associates with actin cytoskeleton in the G2 phase of the cell cycle; which is favored by interaction with NOSIP and results in a reduced enzymatic activity

**Tissue Location** Platelets, placenta, liver and kidney.

## NOS3 Antibody (N-term) - Protocols

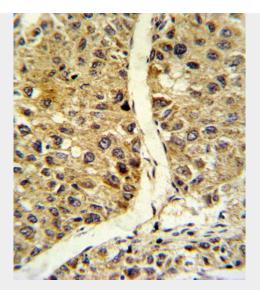
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- NOS3 Antibody (N-term) Images

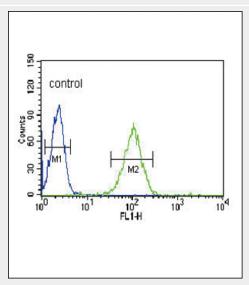


Confocal immunofluorescent analysis of NOS3 Antibody (N-term)(Cat#AP6963a) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).





Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with NOS3 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



NOS3 Antibody (N-term) (Cat. #AP6963a) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# NOS3 Antibody (N-term) - 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.

# NOS3 Antibody (N-term) - References

Rikova,K., et.al., Cell 131 (6), 1190-1203 (2007) NOS3 Antibody (N-term) - Citations

• Oxidative stress and inhibition of nitric oxide generation underlie methotrexate-induced senescence in human colon cancer cells.

