

NOS2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1718a

Specification

NOS2 Antibody - Product Information

Application	E, WB, IHC, FC
Primary Accession	P35228
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	131kDa KDa

Description

Nitric oxide is a reactive free radical which acts as a biologic mediator in several processes, including neurotransmission and antimicrobial and antitumoral activities. This gene encodes a nitric oxide synthase which is expressed in liver and is inducible by a combination of lipopolysaccharide and certain cytokines. Three related pseudogenes are located within the Smith-Magenis syndrome region on chromosome 17.

Immunogen

Purified recombinant fragment of human NOS2 expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

NOS2 Antibody - Additional Information

Gene ID 4843

Other Names

Nitric oxide synthase, inducible, 1.14.13.39, Hepatocyte NOS, HEP-NOS, Inducible NO synthase, Inducible NOS, iNOS, NOS type II, Peptidyl-cysteine S-nitrosylase NOS2, NOS2, NOS2A

Dilution

E~~1/10000
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
FC~~1/200 - 1/400

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

NOS2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NOS2 Antibody - Protein Information

Name NOS2 ([HGNC:7873](#))

Synonyms NOS2A

Function

Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body (PubMed:[7504305](http://www.uniprot.org/citations/7504305), PubMed:[7531687](http://www.uniprot.org/citations/7531687), PubMed:[7544004](http://www.uniprot.org/citations/7544004), PubMed:[7682706](http://www.uniprot.org/citations/7682706)). In macrophages, NO mediates tumoricidal and bactericidal actions. Also has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such PTGS2/COX2 (By similarity). As component of the iNOS-S100A8/9 transnitrosylase complex involved in the selective inflammatory stimulus-dependent S-nitrosylation of GAPDH on 'Cys-247' implicated in regulation of the GAIT complex activity and probably multiple targets including ANXA5, EZR, MSN and VIM (PubMed:[25417112](http://www.uniprot.org/citations/25417112)). Involved in inflammation, enhances the synthesis of pro-inflammatory mediators such as IL6 and IL8 (PubMed:[19688109](http://www.uniprot.org/citations/19688109)).

Cellular Location

Cytoplasm, cytosol. Note=Localizes as discrete foci scattered throughout the cytosol and in the presence of SPSB1 and SPSB4, exhibits a more diffuse cytosolic localization.

Tissue Location

Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets Expressed in chondrocytes (PubMed:7504305)

NOS2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

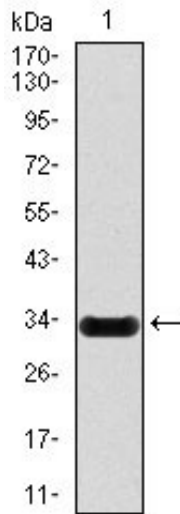
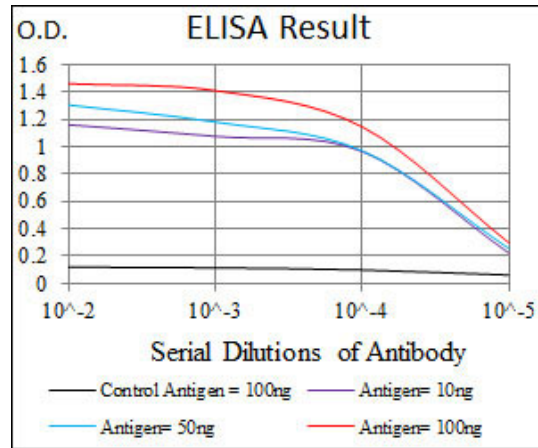


Figure 1: Western blot analysis using NOS2 mAb against human NOS2 (AA: 997-1058) recombinant protein. (Expected MW is 32.6 kDa)

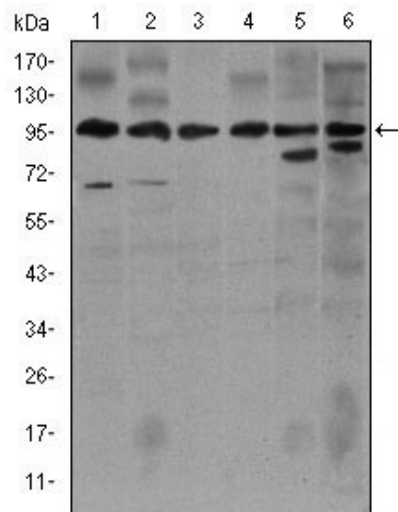


Figure 2: Western blot analysis using NOS2 mouse mAb against Jurkat (1), Jurkat (2), A549 (3), HeLa (4), NIH3T3 (5) and MCF-7 (6) cell lysate.

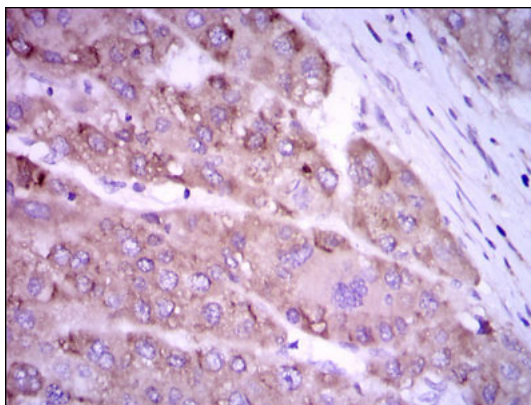


Figure 3: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using NOS2 mouse mAb with DAB staining.

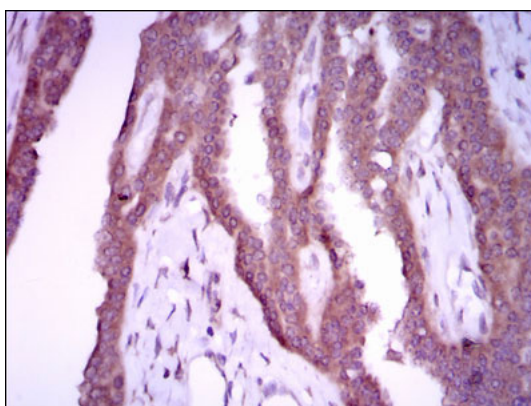


Figure 4: Immunohistochemical analysis of paraffin-embedded breast cancer tissues using NOS2 mouse mAb with DAB staining.

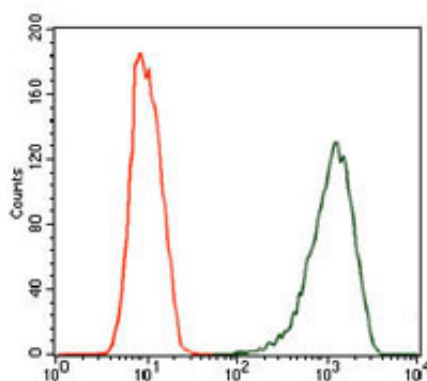


Figure 5: Flow cytometric analysis of MCF-7 cells using NOS2 mouse mAb (green) and negative control (red).

NOS2 Antibody - References

1. *Pediatr Allergy Immunol.* 2010 Dec;21(8):1151-6.
2. *J Biol Chem.* 2010 Dec 31;285(53):41422-31.