

**NOS2 / iNOS Antibody (clone 4E5)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS16734****Specification****NOS2 / iNOS Antibody (clone 4E5) - Product Information**

Application	IHC, WB, E
Primary Accession	<a href="#">P35228</a>
Other Accession	<a href="#">4843</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	131117

**NOS2 / iNOS Antibody (clone 4E5) - Additional Information****Gene ID** 4843**Other Names**

NOS2, Hepatocyte NOS, HEP-NOS, Inducible NOS, NOS, type II, NOS type II, Inducible NO synthase, NOS2A, INOS, NOS

**Target/Specificity**

Human NOS2 / iNOS

**Reconstitution & Storage**

PBS, 0.05% sodium azide, 0.05% protein stabilizer. Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

**Precautions**

NOS2 / iNOS Antibody (clone 4E5) is for research use only and not for use in diagnostic or therapeutic procedures.

**NOS2 / iNOS Antibody (clone 4E5) - 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) target="\_blank">7504305</a>, PubMed: [7531687](http://www.uniprot.org/citations/7531687) target="\_blank">7531687</a>, PubMed: [7544004](http://www.uniprot.org/citations/7544004) target="\_blank">7544004</a>, PubMed: [7682706](http://www.uniprot.org/citations/7682706) target="\_blank">7682706</a>). 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:<a href="http://www.uniprot.org/citations/25417112" target="\_blank">25417112</a>). Involved in inflammation, enhances the synthesis of pro-inflammatory mediators such as IL6 and IL8 (PubMed:<a href="http://www.uniprot.org/citations/19688109" target="\_blank">19688109</a>).

#### 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

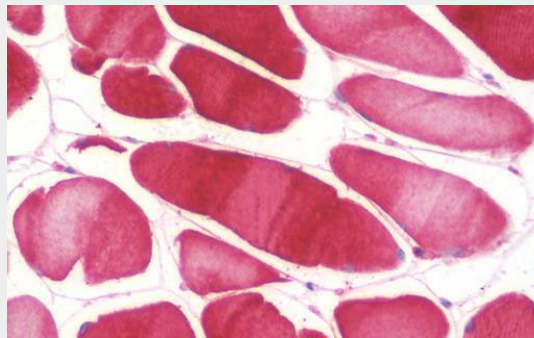
Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets Expressed in chondrocytes (PubMed:7504305)

### NOS2 / iNOS Antibody (clone 4E5) - Protocols

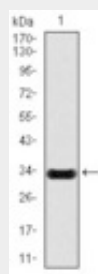
Provided below are standard protocols that you may find useful for product applications.

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

### NOS2 / iNOS Antibody (clone 4E5) - Images

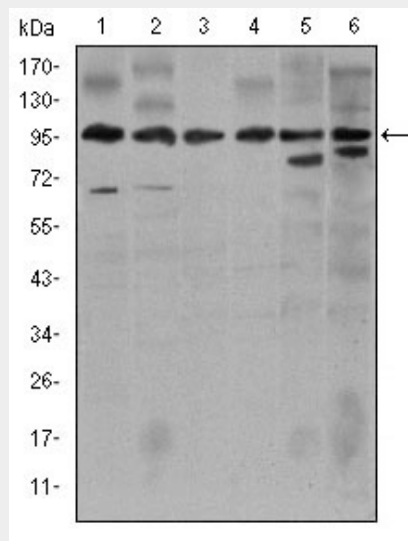


Anti-NOS2 / iNOS antibody IHC staining of human skeletal muscle.

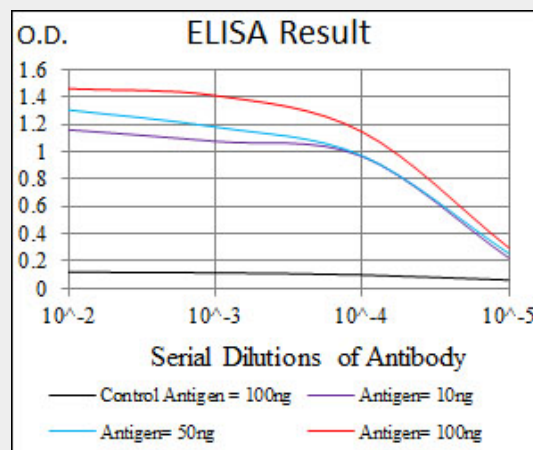


Western blot using NOS2 monoclonal antibody against human NOS2 (AA: 997-1058) recombinant

protein.



Western blot using NOS2 mouse monoclonal antibody against Jurkat (1), Jurkat (2), A549 (3), HeLa...



Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng);

### NOS2 / iNOS Antibody (clone 4E5) - Background

Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In macrophages, NO mediates tumoricidal and bactericidal actions. Also has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such COX2.

### NOS2 / iNOS Antibody (clone 4E5) - References

Sherman P.A., et al. *Biochemistry* 32:11600-11605(1993).  
Geller D.A., et al. *Proc. Natl. Acad. Sci. U.S.A.* 90:3491-3495(1993).  
Charles I.G., et al. *Proc. Natl. Acad. Sci. U.S.A.* 90:11419-11423(1993).  
Maier R., et al. *Biochim. Biophys. Acta* 1208:145-150(1994).  
Park C.S., et al. *Biochem. Biophys. Res. Commun.* 205:85-91(1994).

### NOS2 / iNOS Antibody (clone 4E5) - Citations

- [Alternative microglial activation is associated with cessation of progressive dopamine neuron loss in mice systemically administered lipopolysaccharide.](#)

