

Rabbit Anti-iNOS antibody

SL0162R

Product Name iNOS

Chinese Name 一氧化氮合成酶-2 (诱导型) 抗体

Alias i NOS; Nitric Oxide Synthase, Inducible; HEP NOS; Hepatocyte NOS; HEPNOS; Inducible nitric oxide synthase; Inducible NO synthase; Inducible NOS; INOS; Inosl; MAC NOS; Macrophage NOS; Nitric oxide synthase 2 inducible macrophage; Nitric oxide synthase 2A (inducible hepatocytes); Nitric oxide synthase inducible; NOS 2; NOS 2A; NOS; Nos II; NOS type II; Nos2; NOS2A; NOS2_HUMAN.

Research Area Cell biology immunology Neurobiology Signal transduction transcriptional regulatory factor Kinases and Phosphatases

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat,

WB=1:1000-5000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
(Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 130kDa

Cellular localization The nucleus cytoplasmic

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human NOS-2: 1051-1144/1144

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or

PubMed

diagnostic applications.

[PubMed](#)

Nitric oxide (NO) is an inorganic, gaseous free radical that carries a variety of messages between cells. Vasorelaxation, neurotransmission and cytotoxicity can all be potentiated through cellular response to NO. NO production is mediated by members of the nitric oxide synthase (NOS) family. NOS catalyzes the oxidization of L-arginine to produce L-citrulline and NO. Two constitutive isoforms, brain or neuronal NOS (b or nNOS, type I) & endothelial cell NOS (eNOS, type III), and one inducible isoform (iNOS, type II), have been cloned. All NOS isoforms contain calmodulin, nicotinamide adenine dinucleotide phosphate (NADPH), flavin adenine dinucleotide (FAD), and flavin mononucleotide (FMN) binding domains. Nitric oxide synthase is expressed in liver, macrophages, hepatocytes, synoviocytes, stimulated glial cells and smooth muscle cells. Cytokines such as interferon-gamma (IFN), tumor necrosis factor (TNF), interleukin-1 and -2, and lipopolysaccharides (LPS) cause an increase in iNOS mRNA, protein, and activity levels. Protein kinase C-stimulating agents exhibit the same effect on iNOS activity. After cytokine induction, iNOS exhibits a delayed activity response which is then followed by a significant increase in NO production over a long period of time. Human iNOS is regulated by calcium/calmodulin (in contrast with mouse NOS2).

**Product
Detail**

Function:

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.

Subunit:

Homodimer. Binds SLC9A3R1.

Tissue Specificity:

Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets.

Similarity:

Belongs to the NOS family.
Contains 1 FAD-binding FR-type domain.
Contains 1 flavodoxin-like domain.

SWISS:

P35228

Gene ID:

4843

Database links:

[Entrez Gene: 4843](#) Human

[Entrez Gene: 18126](#) Mouse

[Entrez Gene: 24599](#) Rat

[Omim: 163730](#) Human

[SwissProt: P35228](#) Human

[SwissProt: P29477](#) Mouse

[SwissProt: Q06518](#) Rat

[Unigene: 709191](#) Human

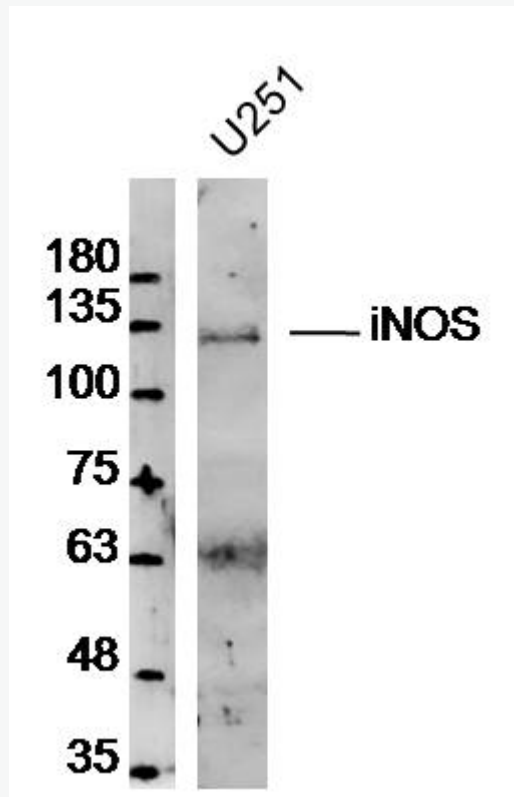
[Unigene: 2893](#) Mouse

[Unigene: 10400](#) Rat

Synthesis and Degradation (Synthesis and Degradation)

催化生物体内一氧化氮(NO)生成的酶。分神经型一氧化氮合成的酶(nNOS or NOS-1)、诱导型一氧化氮合成的酶(iNOS or NOS-2)、内皮型一氧化氮合成的酶(eNOS or NOS-3)。

**Product
Picture**



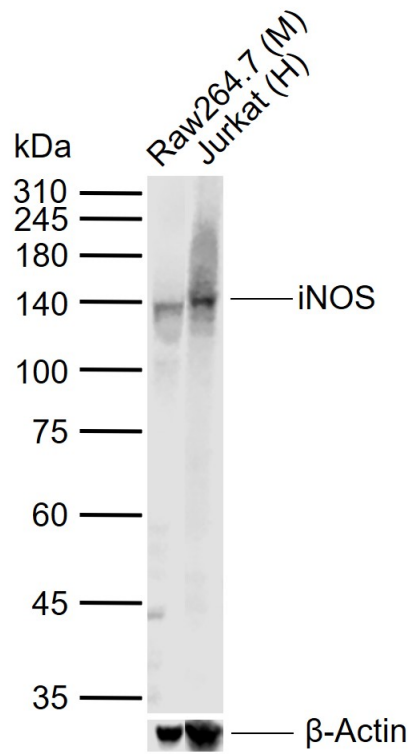
Sample:U251 Cell Lysate at 40 ug

Primary: Anti-iNOS(SL0162R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution

Predicted band size: 130kD

Observed band size: 130kD



Sample:

Lane 1: Mouse Raw264.7 tissue lysates

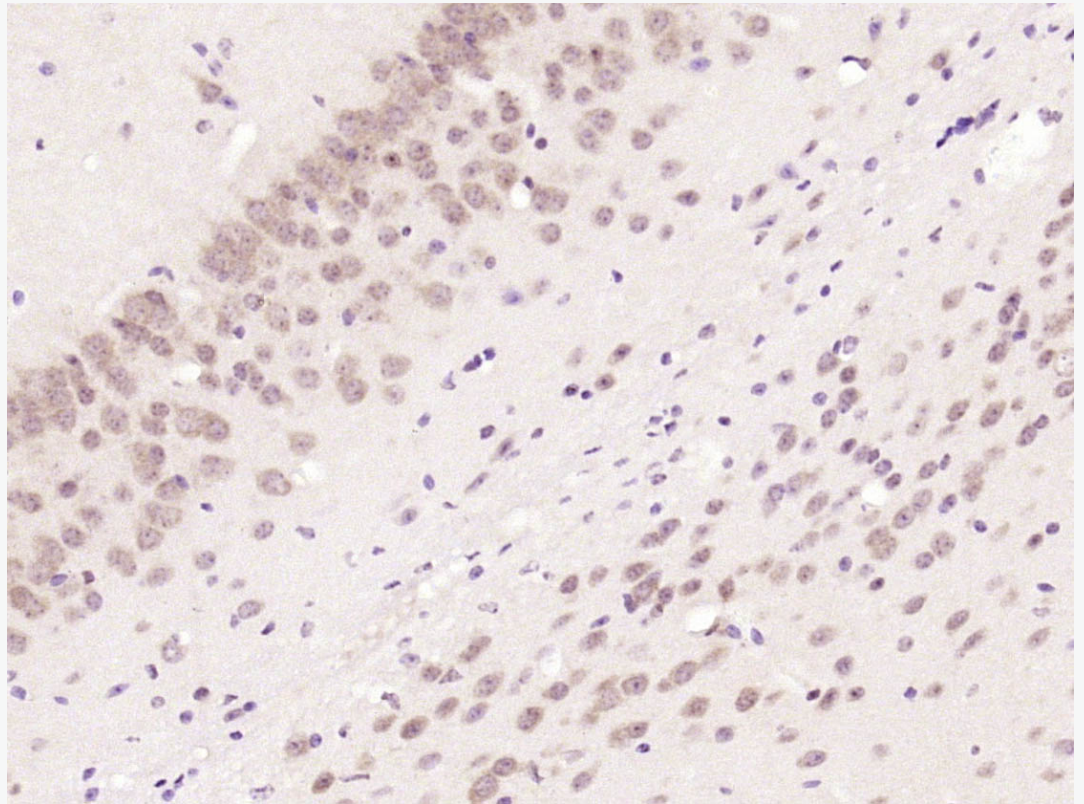
Lane 2: Human Jurkat cell lysates

Primary: Anti-iNOS (SL0162R) at 1/1000 dilution

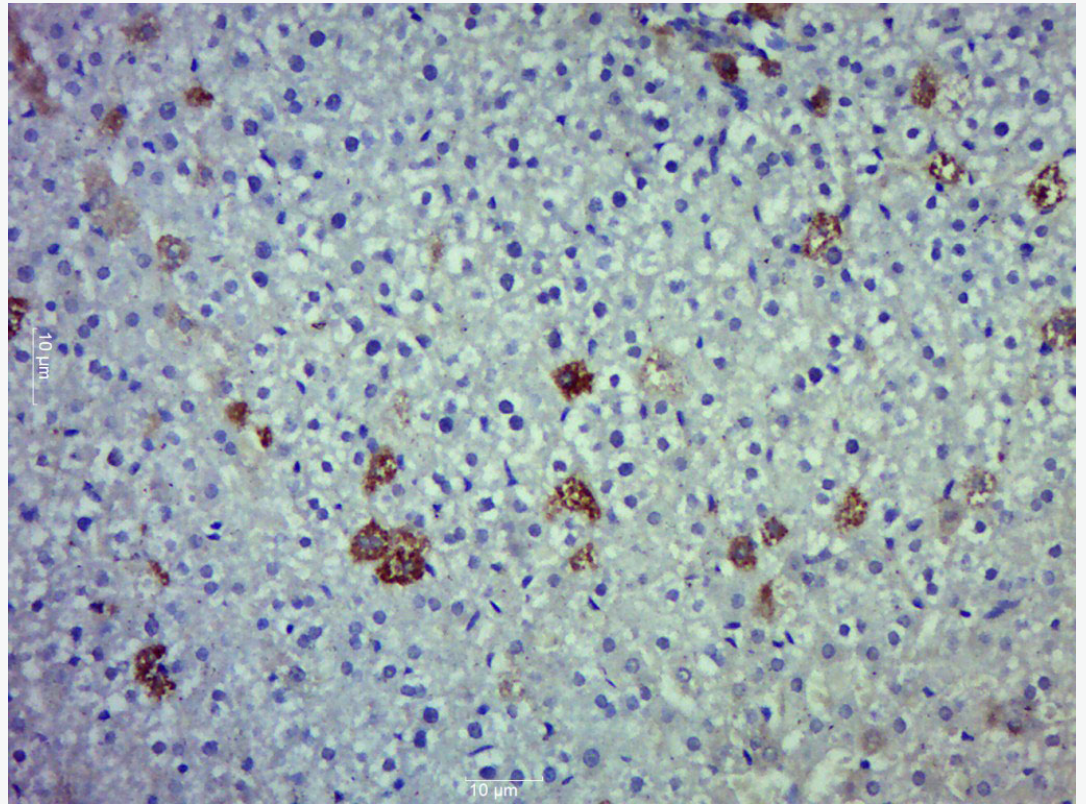
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 130 kDa

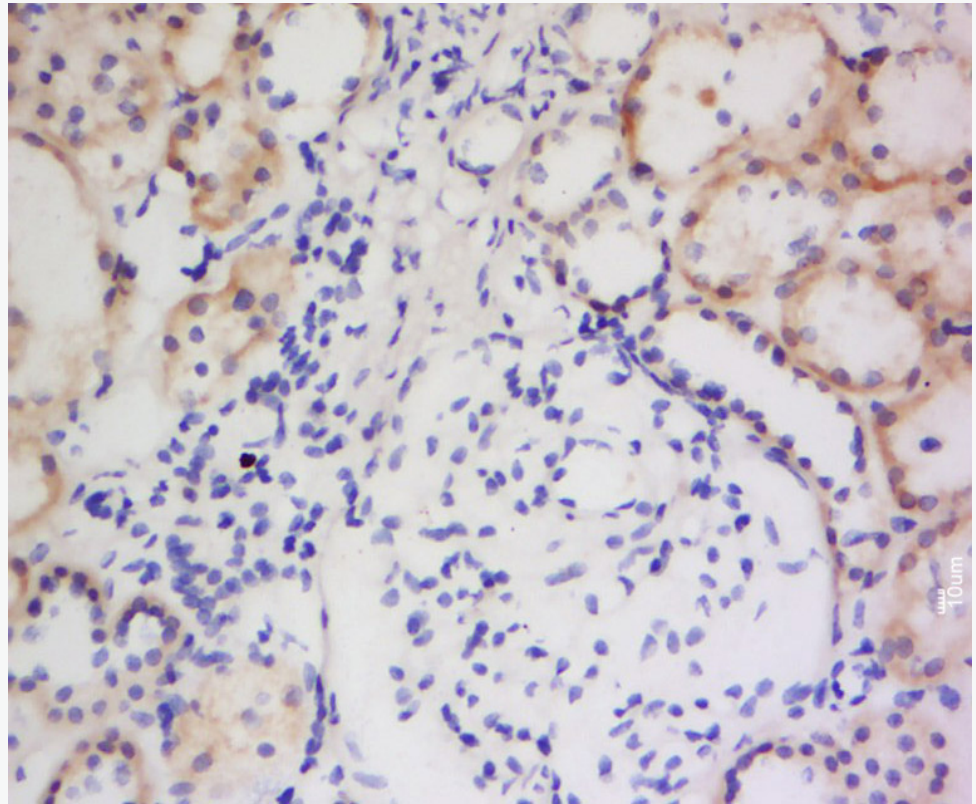
Observed band size: 140 kDa



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (inos) Polyclonal Antibody, Unconjugated (SL0162R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

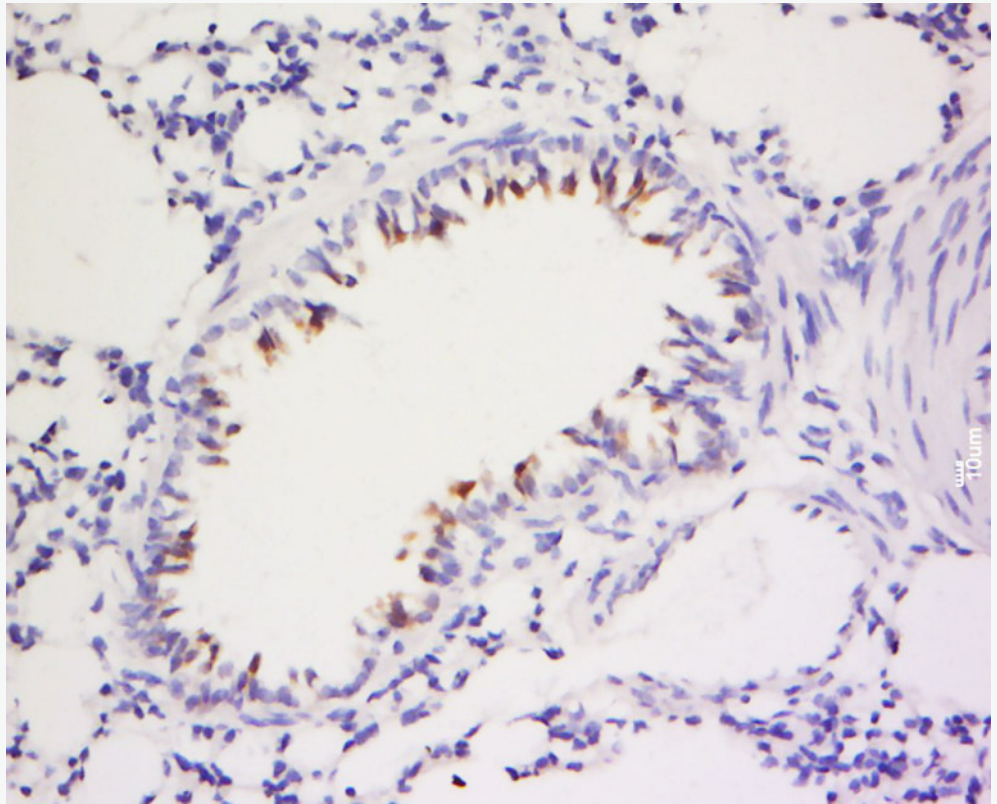


Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (iNOS) Polyclonal Antibody, Unconjugated (SL0162R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block
endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal
goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-iNOS Polyclonal Antibody, Unconjugated(SL0162R) 1:200, overnight at
4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010)
staining



Tissue/cell: Rat lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-iNOS Polyclonal Antibody, Unconjugated(SL0162R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining