



iNOS Polyclonal Antibody

Catalog No	YP-Ab-17172
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IF;WB;IHC;ELISA
Gene Name	NOS2, INOS
Immunogen	The antiserum was produced against synthesized peptide derived from human iNOS. AA range:117-166
Specificity	NOS2 Polyclonal Antibody detects endogenous levels of NOS2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IF: 1:50-200 WB 1:500-2000, ELISA 1:10000-20000 IHC 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	NOS2;EC:1.14.13.39;Hepatocyte NOS;HEP-NOS;Inducible NO synthase;NOS2/iNOS;INOS;Nitric oxide synthase inducible;NOS2A;Nitric oxide synthase;inducible;Inducible NOS;NOS type II;Peptidyl-cysteine S-nitrosylase NOS2
Observed Band	131kD
Calculated Molecular Weight	131kD
Cell Pathway	Cytoplasm, cytosol . Localizes as discrete foci scattered throughout the cytosol and in the presence of SPSB1 and SPSB4, exhibits a more diffuse cytosolic localization. .
Tissue Specificity	Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets. Expressed in chondrocytes (PubMed:7504305).
Function	catalytic activity:L-arginine + n NADPH + n H(+) + m O(2) = citrulline + nitric oxide + n NADP(+).,cofactor: Binds 1 FAD.,cofactor: Binds 1 FMN.,cofactor: Heme group.,cofactor: Tetrahydrobiopterin (BH4). May stabilize the dimeric form of the enzyme.,enzyme regulation: Regulated by calcium/calmodulin. Aspirin inhibits expression and function of this enzyme and effects may be exerted at the level of translational/post-translational modification and directly on the catalytic activity.,function: Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In macrophages, NO mediates



tumoricidal and bactericidal actions.,induction:By endotoxins and cytokines.,
online information:Nitric oxide synthase entry,similarity:Belongs to the NOS
family.,similarity:Contains 1 FAD-binding FR-type domain.,similarity:Contains 1
flavodoxin-like domain.,subunit:Homodimer. Bin

Background

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. [provided by RefSeq, Jul 2008],

matters needing attention

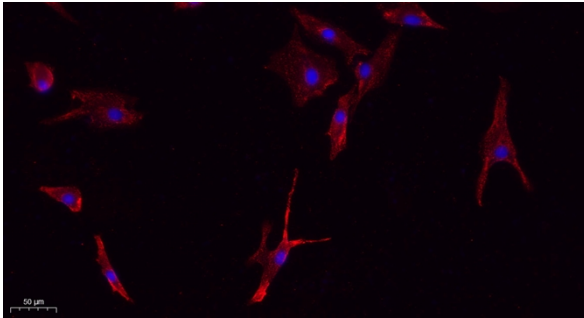
Avoid repeated freezing and thawing!

Usage suggestions

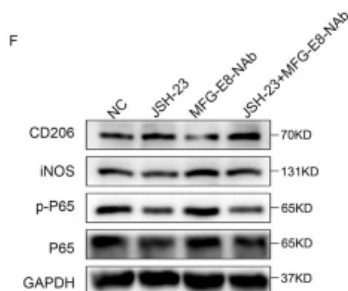
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



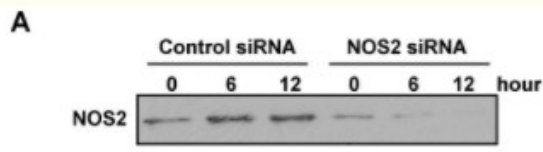
Products Images



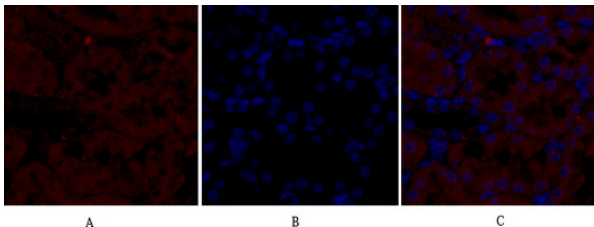
Immunofluorescence analysis of A549. 1, primary Antibody (red) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.



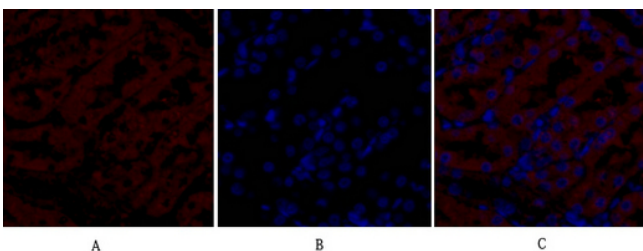
Lu, Y., Liu, L., Pan, J. et al. MFG-E8 regulated by miR-99b-5p protects against osteoarthritis by targeting chondrocyte senescence and macrophage reprogramming via the NF-κB pathway. *Cell Death Dis* 12, 533 (2021).



Zhu, Xiao-Ming, et al. "PM2. 5 induces autophagy-mediated cell death via NOS2 signaling in human bronchial epithelium cells." *International journal of biological sciences* 14.5 (2018): 557.



Immunofluorescence analysis of rat-kidney tissue. 1, NOS2 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of rat-kidney tissue. 1, NOS2 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B