



iNOS Rabbit mAb

Catalog No	YP-rAb-17478
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IF,IP,ELISA
Gene Name	NOS2, INOS
Protein Name	Nitric oxide synthase inducible
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	NOS2 ; NOS2A ; Nitric oxide synthase ; inducible ; Hepatocyte NOS ; HEP-NOS ; Inducible NO synthase ; Inducible NOS ; iNOS ; 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. Binds SLC9A3R1.,tissue specificity:Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets.,

Background

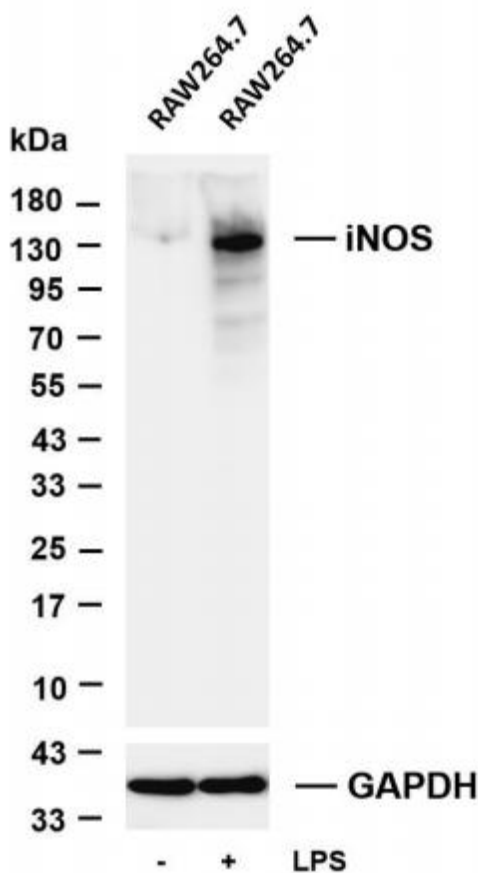
Nitric oxide is a reactive free radical which acts as a biologic mediator in several processes, including neurotransmission and antimicrobial and antitumoral activities. This gene encodes a nitric oxide synthase which is expressed in liver and is inducible by a combination of lipopolysaccharide and certain cytokines. Three related pseudogenes are located within the Smith-Magenis syndrome region on chromosome 17. [provided by RefSeq, Jul 2008],

matters needing attention

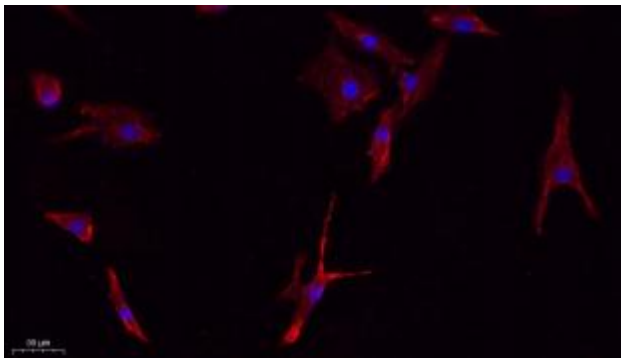
Avoid repeated freezing and thawing!

Usage suggestions

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

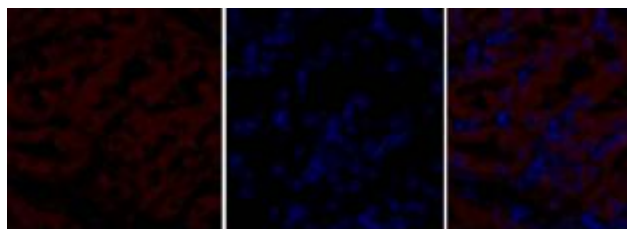


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-iNOS antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: RAW264.7 Lane 2: RAW264.7 treated overnight with 1 μ g/ml LPS Predicted band size: 131kDa Observed band size: 131kDa



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





A

B

C

Immunofluorescence analysis of rat-kidney tissue.
1, NOS2 Monoclonal 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

