

ARG56509 anti-iNOS antibody

Package: 250 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes iNOS
Tested Reactivity	Hu, Ms, Rat, Mamm
Tested Application	ICC/IF, IHC-Fr, IHC-P, IP, WB
Specificity	This antibody may cross-react to nNOS (~5%) and does not cross-react to eNOS.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	iNOS
Species	Mouse
Immunogen	Purified enzyme from Mouse macrophages (RAW 264.7) cells.
Conjugation	Un-conjugated
Alternate Names	HEP-NOS; Inducible NO synthase; INOS; Nitric oxide synthase, inducible; iNOS; Hepatocyte NOS; NOS2A; Peptidyl-cysteine S-nitrosylase NOS2; Inducible NOS; NOS; NOS type II; EC 1.14.13.39

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:200
	IHC-Fr	Assay-dependent
	IHC-P	1:200 - 1:1000
	IP	1:200
	WB	1:200 - 1:1000
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 10mM citrate buffer, pH 6.0 or Tris-EDTA pH 9.0 for 20 min followed by cooling at RT for 20 min. Incubate with the antibody at 4°C for overnight. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	TBS (pH 7.4) and 0.5 mg/ml BSA.
Stabilizer	0.5 mg/ml BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

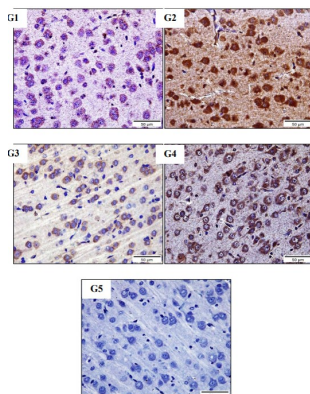
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	Nos2
Gene Full Name	nitric oxide synthase 2, inducible
Background	iNOS: Nitric oxide is a reactive free radical which acts as a biologic mediator in several processes, including neurotransmission and antimicrobial and antitumoral activities. Nitric oxide synthase 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]
Function	iNOS produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body (PubMed:7531687, PubMed:7544004). In macrophages, NO mediates tumoricidal and bactericidal actions. Also has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such PTGS2/COX2. 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). Involved in inflammation, enhances the synthesis of proinflammatory mediators such as IL6 and IL8 (PubMed:19688109). [UniProt]
Highlight	Related Antibody Duos and Panels: ARG30323 Inflammation Antibody Panel ARG30333 M1/M2/TAM Marker Antibody Panel Related products: iNOS antibodies ; iNOS ELISA Kits ; iNOS Duos / Panels ; Anti-Rabbit IgG secondary antibodies ; Related news: New antibody panels and duos for Tumor immune microenvironment Tumor-Infiltrating Lymphocytes (TILs) Exploring Antiviral Immune Response Anti-SerpinB9 therapy, a new strategy for cancer therapy RIP1 activation and pathogenesis of NASH
Research Area	Inflammation Study antibody; M1/M2/TAM Marker antibody; Macrophage Marker antibody; M1
Calculated Mw	macrophage Marker antibody 131 kDa

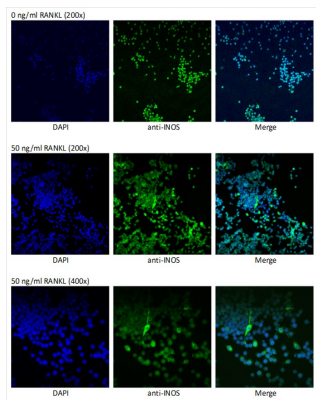
Images



ARG56509 anti-iNOS antibody IHC-P image

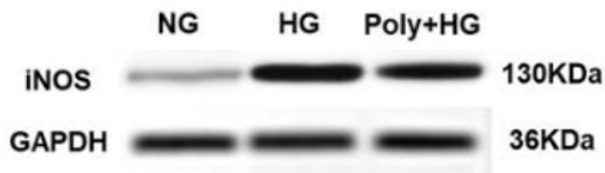
Immunohistochemistry: Rat Brain stained with ARG56509 anti-iNOS antibody at 1:100 dilution.

From Abrar Roshdy Abouelkeir et al. European Chemical Bulletin,(2023) [doi: 10.31838/ecb/2023.12.1.470](https://doi.org/10.31838/ecb/2023.12.1.470), Fig. 6.



ARG56509 anti-iNOS antibody ICC/IF image (Customer's Feedback)

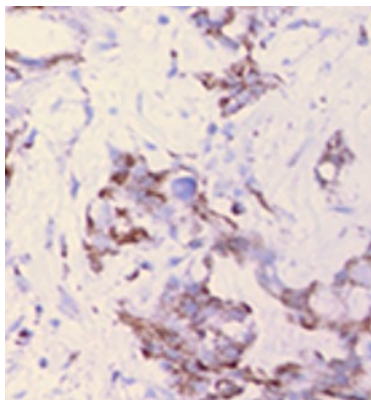
Immunofluorescence: RAW264.7 cells were fixed with 4% paraformaldehyde for 15 min at RT, permeabilized with 0.1% Triton X-100 then blocked with 2% albumin for 60 min at RT. Cells were stained with ARG56509 anti-iNOS antibody (green) at 4°C. DAPI (blue) was used as the nuclear counter stain.



ARG56509 anti-iNOS antibody WB image

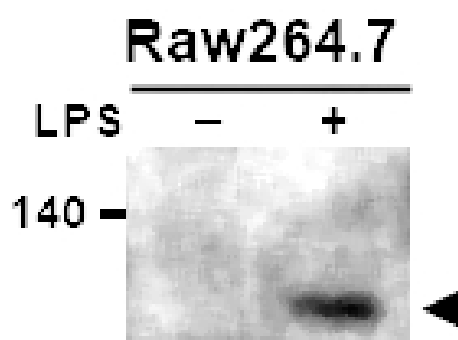
Western blot: Rat Aortic stained with ARG56509 anti-iNOS antibody at 1:1000 dilution.

From Wahid Shah et al. Sci Rep. (2023), [doi: 10.1038/s41598-023-43786-4](https://doi.org/10.1038/s41598-023-43786-4), Fig. 2. C.



ARG56509 anti-iNOS antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human pancreatic ductal adenocarcinoma stained with ARG56509 anti-iNOS antibody.



ARG56509 anti-iNOS antibody WB image

Western blot: Raw264.7 cells untreated or treated with LPS. 20 µg of cell lysates stained with ARG56509 anti-iNOS antibody at 1:400 dilution.