

Product datasheet

Anti-iNOS antibody [EPR16635] ab178945

Recombinant **RabMAb**

★★★★☆ 2 Abreviews 29 References 4 Images

Overview

Product name	Anti-iNOS antibody [EPR16635]
Description	Rabbit monoclonal [EPR16635] to iNOS
Host species	Rabbit
Specificity	This antibody shows low affinity on human samples.
Tested applications	Suitable for: WB, ICC/IF, IP
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment within Human iNOS aa 1-200. The exact sequence is proprietary. Database link: P35228
	Run BLAST with Run BLAST with
Positive control	WB: RAW 264.7 treated with 0.1 µg/mL LPS for 6 hours, HepG2 treated with 10 µg/mL LPS for 6 hours, whole cell lysates; Human fetal brain lysate. ICC/IF: RAW 264.7 cells treated with LPS (0.1 µg/mL), for 6 hours. IP: RAW 264.7 whole cell lysate treated with 1µg/mL LPS for 24h.
General notes	Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . This product is a recombinant rabbit monoclonal antibody .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR16635
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab178945** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★☆	1/1000. Detects a band of approximately 131 kDa (predicted molecular weight: 131 kDa). To detect iNOS expression, macrophages need to be treated with LPS (0.1 - 1 ug/ml).
ICC/IF		1/500. To detect iNOS expression, macrophages need to be treated with LPS (0.1 - 1 ug/ml).
IP		1/100. To detect iNOS expression, macrophages need to be treated with LPS (0.1 - 1 ug/ml).

Target

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.

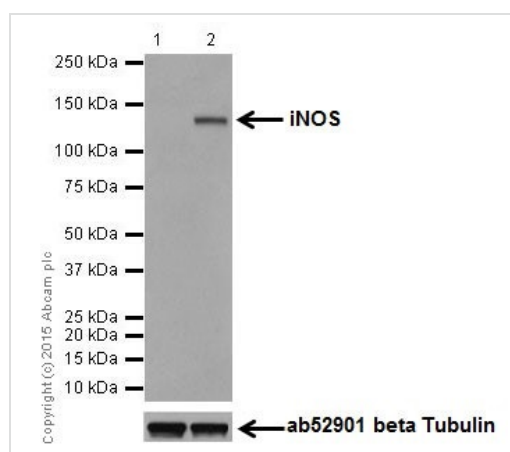
Tissue specificity

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

Sequence similarities

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

Images



Western blot - Anti-iNOS antibody [EPR16635] (ab178945)

All lanes : Anti-iNOS antibody [EPR16635] (ab178945) at 1/20000 dilution

Lane 1 : Untreated RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate

Lane 2 : RAW 264.7 whole cell lysate treated with 0.1 µg/mL LPS for 6 hours

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 131 kDa

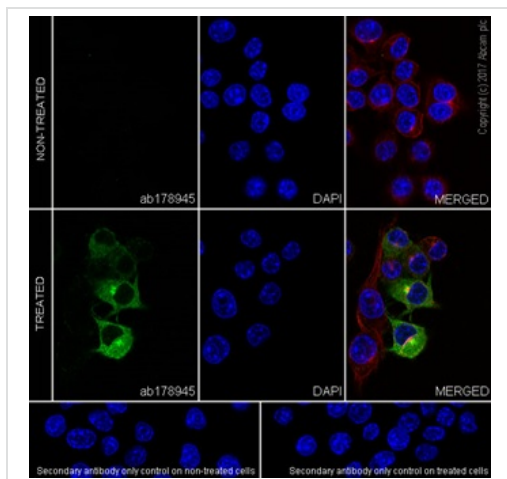
Observed band size: 131 kDa

Exposure time: 30 seconds

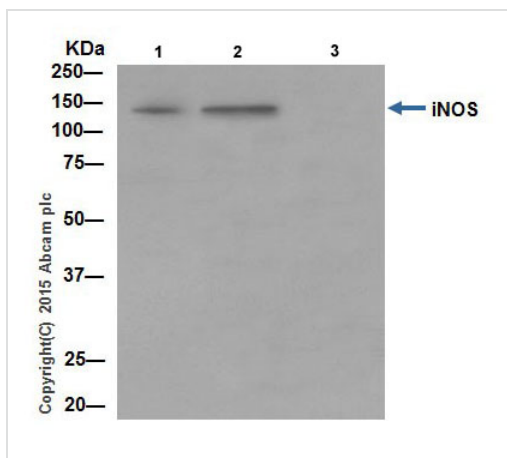
Blocking and dilution buffer: 5% NFDm/TBST.

Immunocytochemistry/Immunofluorescence analysis of RAW 264.7 non-treated and LPS treated (0.1 µg/mL) cells labelling iNOS with ab178945 at 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. The cells were co-stained with ab195889, Alexa Fluor® 594 conjugated anti-alpha tubulin (1/200). Nuclei counterstained with DAPI (blue).

Secondary antibody only controls performed on non-treated and treated cells.



Immunocytochemistry/ Immunofluorescence - Anti-iNOS antibody [EPR16635] (ab178945)



Immunoprecipitation - Anti-iNOS antibody [EPR16635] (ab178945)

iNOS was immunoprecipitated from 1mg of RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate treated with 1 µg/ml LPS for 24h with ab178945 at 1/100 dilution.

Lane 1: RAW 264.7 whole cell lysate treated with 1 µg/ml LPS for 24h, 10ug (Input).

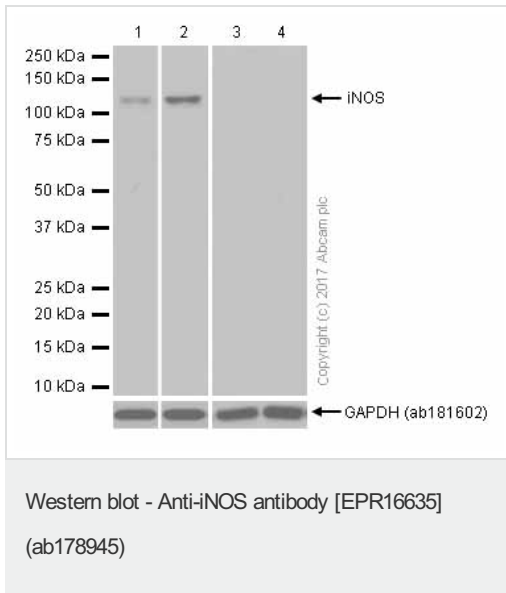
Lane 2: ab178945 IP in RAW 264.7 whole cell lysate treated with 1 µg/ml LPS for 24h.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab178945 in RAW 264.7 whole cell lysate treated with 1 µg/ml LPS for 24h.

Western blot was performed from the immunoprecipitate using ab178945 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1/1500.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 30 seconds.



All lanes : Anti-iNOS antibody [EPR16635] (ab178945) at 1/500 dilution

Lane 1 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates

Lane 2 : HepG2 (Human hepatocellular carcinoma epithelial cell) treated with 10ug/ml lipopolysaccharides for 6 hours whole cell lysates

Lane 3 : THP-1 (Human monocytic leukemia monocyte) whole cell lysates

Lane 4 : THP-1 (Human monocytic leukemia monocyte) treated with 100ng/ml lipopolysaccharides for 3 hours whole cell lysates

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/200000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 131 kDa

Exposure time: 3 minutes

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