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Anti-iNOS Antibody

Catalog # AP51393

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P35228
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	131117

Additional Information

Gene ID	4843
Other Names	NOS2A; Nitric oxide synthase, inducible; Hepatocyte NOS; HEP-NOS; Inducible NO synthase; Inducible NOS; iNOS; NOS type II; Peptidyl-cysteine S-nitrosylase NOS2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human iNOS. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

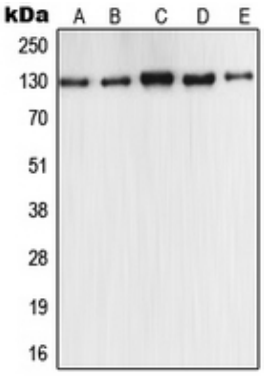
Name	NOS2 (HGNC:7873)
Synonyms	NOS2A
Function	Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body (PubMed:7504305, PubMed:7531687, PubMed:7544004, PubMed:7682706). In macrophages, NO mediates tumoricidal and bactericidal actions. Also has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such PTGS2/COX2 (By similarity). 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 pro-inflammatory mediators such as IL6 and IL8 (PubMed:19688109).

Cellular Location	Cytoplasm, cytosol. Note=Localizes as discrete foci scattered throughout the cytosol and in the presence of SPSB1 and SPSB4, exhibits a more diffuse cytosolic localization.
Tissue Location	Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets Expressed in chondrocytes (PubMed:7504305)

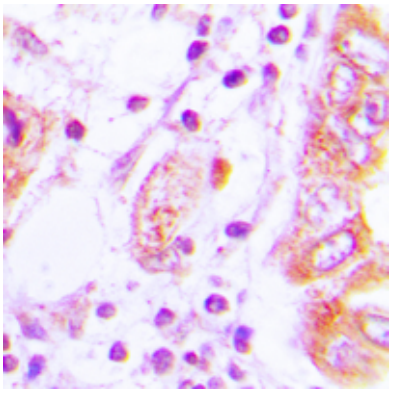
References

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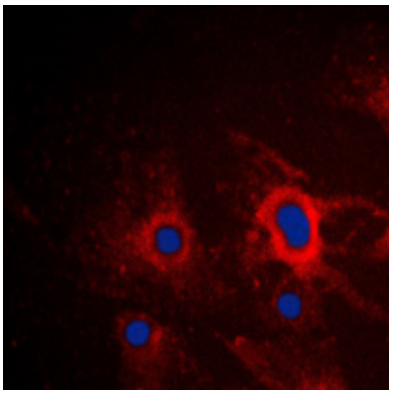
Images



Western blot analysis of iNOS expression in MCF7 (A), A549 (B), Raw264.7 (C), PC12 (D), rat liver (E) whole cell lysates. (Predicted band size: 126; 131 kD; Observed band size: 130 kD)



Immunohistochemical analysis of iNOS staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of iNOS staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.