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NOS2A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11772c

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	P35228
Other Accession	NP_000616.3
Reactivity	Human
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18210
Calculated MW	131117
Antigen Region	830-860

Additional Information

Gene ID	4843
Other Names	Nitric oxide synthase, inducible, Hepatocyte NOS, HEP-NOS, Inducible NO synthase, Inducible NOS, iNOS, NOS type II, Peptidyl-cysteine S-nitrosylase NOS2, NOS2, NOS2A
Target/Specificity	This NOS2A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 830-860 amino acids from the Central region of human NOS2A.
Dilution	WB~~1:2000 IHC-P~~1:100~500 FC~~1:25 IF~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NOS2A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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)

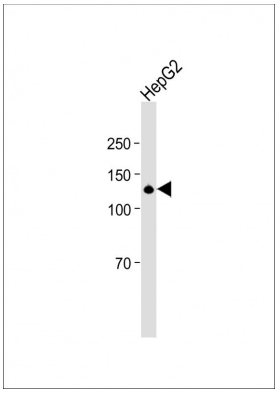
Background

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.

References

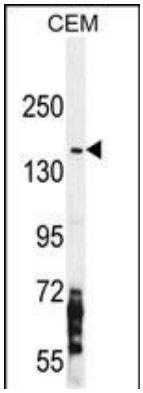
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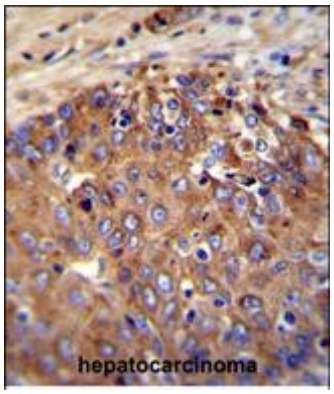
Images



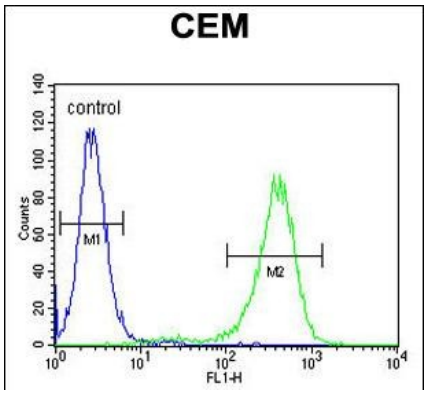
All lanes: Anti-NOS2A Antibody (Center) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 130 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

NOS2A Antibody (Center) (Cat. #AP11772c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the NOS2A antibody detected the NOS2A protein (arrow).

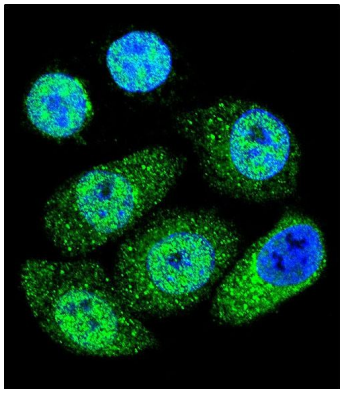




NOS2A Antibody (Center) (Cat. #AP11772c)immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of NOS2A Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



NOS2A Antibody (Center) (Cat. #AP11772c) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of NOS2A Antibody (Center)(Cat#AP11772c) with hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

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