10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-iNOS Picoband Antibody

Catalog # ABO10066

Product Information

Application	WB
Primary Accession	P35228
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Nitric oxide synthase, inducible(NOS2) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4843
Other Names	Nitric oxide synthase, inducible, 1.14.13.39, Hepatocyte NOS, HEP-NOS, Inducible NO synthase, Inducible NOS, iNOS, NOS type II, Peptidyl-cysteine S-nitrosylase NOS2, NOS2, NOS2A
Calculated MW	131117
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Tissue Specificity	Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets.
Source	Eukaryota
Protein Name	Nitric oxide synthase, inducible
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human iNOS (1088-1126aa ARDVAHTLKQLVAAKLKLNEEQVEDYFFQLKSQKRYHED), different from the related mouse sequence by five amino acids, and from the related rat sequence by four amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated

freezing and thawing.

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 synthase, inducible is an enzyme that in humans is encoded by the NOS2 gene. Nitric oxide (NO) is a messenger molecule with diverse functions throughout the body. In the brain and peripheral nervous system, NO displays many properties of a neurotransmitter; it is implicated in neurotoxicity associated with stroke and neurodegenerative diseases, neural regulation of smooth muscle, including peristalsis, and penile erection. Three different NOS isoforms have been identified which fall into two distinct types, constitutive and inducible. The inducible NOS (iNOS) isoform is expressed in a variety of cell types and tissues in response to inflammatory agents and cytokines. The human iNOS (NOS2) gene is approximately 37 kb in length and consists of 26 exons and 25 introns. NOS2-derived NO is a prerequisite for cytokine signaling and function in innate immunity.

Images



Western blot analysis of iNOS expression in HELA whole cell lysates (lane 1). iNOS at 130KD was detected using rabbit anti- iNOS Antigen Affinity purified polyclonal antibody (Catalog #ABO10066) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

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