

Datasheet for 600-401-P89**NOS2 Antibody****Overview**

Description:	Anti-NOS2 (RABBIT) Antibody - 600-401-P89
Item No.:	600-401-P89
Size:	100 µg
Applications:	WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

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. Diefenbach et al. (1999) studied the relationship of IL12 and nitric oxide synthase-2 (NOS2) to innate immunity to the parasite Leishmania in mice. And conclude that NOS2-derived NO is a prerequisite for cytokine signaling and function in innate immunity. From studies in Tanzania and Kenya, Hobbs et al. (2002) identified a novel single-nucleotide polymorphism, -1173C-T (163730.0001), in the NOS2 promoter that was significantly associated with protection from symptomatic malaria and severe malarial anemia. This antibody is suitable for researchers interested in cancer and neuroscience research.
Synonyms:	NOS2A, Peptidyl-cysteine S-nitrosylase NOS2, Nitric oxide synthase inducible, Hepatocyte NOS, HEP-NOS, Inducible NO synthase, Inducible NOS, iNOS, NOS type II
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	NOS2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	NOS2 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a sequence at the C-terminal of human NOS2.
Purity/Specificity:	Anti-NOS2 antibody is directed against human NOS2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, mouse, and rat based on 100% homology for the immunogen sequence. Cross reactivity with NOS2 from other sources has not been determined.
Relevant Links:	• UniProtKB - P35228 • GenelD - 4843 • NCBI - NP_000616.3

Application Details

Tested Applications:	WB
Application Note:	Anti-NOS2 tested in Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~131.1 kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	0.5µg/mL

Formulation

Physical State:	Lyophilized
Concentration:	0.5 mg/mL by UV absorbance at 280 nm
Buffer:	0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3
Preservative:	0.05mg Thimerosal
Stabilizer:	5mg BSA
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.