

Datasheet for 200-301-P43**Nitric Oxide Synthase (NOS1) Antibody****Overview**

Description:	Anti-Nitric Oxide Synthase (NOS1) (MOUSE) Antibody - 200-301-P43
Item No.:	200-301-P43
Size:	100 µg
Applications:	WB
Reactivity:	Human, Rat, Goat, Pig
Host Species:	Mouse

Product Details**Background:**

Nitric Oxide Synthase 1(NOS1,neuronal NOS,nNOS1) is a messenger molecule, mediating the effect of endothelium-derived relaxing factor in blood vessels and the cytotoxic actions of macrophages, and playing a part in neuronal communication in the brain. It may be involved in neuronal cell death and damage in neurological illness. nNOS1 localized to the 12q24.2 region of human chromosome 12. It splice variant, expressed in testis, that encodes an NH2-terminal truncated protein of 1098 amino acids. nNOS cDNA clones were shown to contain different 5' terminal exons spliced to a common exon 2. Genomic cloning and sequence analysis demonstrate that the unique exons are positioned within 300 bp of each other but separated from exon 2 by an intron that is at least 20 kb in length. The neuronal isoform of nitric oxide synthase is highly expressed in mammalian skeletal muscle, it suggested a specific role for NOS1 in the local metabolic inhibition of alpha-adrenergic vasoconstriction in active skeletal muscle. The novel gaseous neuromediator nitric oxide is thought to play an important role in development and plasticity. Despite this, gene-knockout mice lacking neuronal (Type I) nitric oxide synthase exhibit relatively normal brain development and behavior. This antibody is suitable for researchers interested in apoptosis research, cell death, and TNF pathways.

Synonyms:	NOS, bNOS, nNOS, IHPS1, N-NOS, NC-NOS, Neuronal NOS, Peptidyl-cysteine S-nitrosylase NOS1
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	NOS-B1
Format:	IgG1

Target Details

Gene Name:	NOS1
Reactivity:	Human, Rat, Goat, Pig
Immunogen Type:	Recombinant Protein
Immunogen:	Nitric Oxide Synthase (NOS1) antibody was produced in mice by repeated immunizations with recombinant protein corresponding to neuronal NOS fragment (amino acids 1-181) from rat brain.
Purity/Specificity:	Anti-NOS1 antibody was purified from mouse ascites by protein A chromatography. This product reacts with human, rat, goat, and pig. Cross reactivity with NOS1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P29475 • GeneID - 4842 • NCBI - NP_000611.1

Application Details

Tested Applications:	WB
Application Note:	Anti-NOS1 is tested for Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~161 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.
ELISA:	1:5000
WB:	0.5ug/ml

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	1.2% sodium acetate
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	2mg BSA

Reconstitution Volume: 1.0 mL

Reconstitution Buffer: Neutral PBS

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.