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Datasheet for 600-401-DE1

NOX4 Antibody

Overview

Description:	Anti-NOX4 (RABBIT) Antibody - 600-401-DE1
Item No.:	600-401-DE1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The NOX family of NAPDH oxidases is comprised of seven transmembrane proteins that oxidize intracellular NAPDH/NADH, causing electron transport across the membrane and the reduction of molecular oxygen to superoxide (1). NOX4 is expressed in multiple tissues and catalyzes the reduction of molecular oxygen to various reactive oxygen species (ROS) (2,3). Unlike other NOX proteins, NOX4 does not require cytosolic subunits and thus is constitutively active (4). The function of NOX4 remains unclear as it plays both protective and deleterious roles in cellular metabolism.
Synonyms:	NAPDH oxidase 4, NOX-4, RENOX, KOX, KOX-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	NOX4
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-NOX4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid peptide near the N-terminus of human NOX4.

Purity/Specificity:	Anti-NOX4 antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. NOX4 antibody is human, mouse, and rat reactive. At least four isoforms of NOX4 are known to exist. NOX4 is predicted to not cross-react with other NOX proteins.
Relevant Links:	• UniProtKB - Q9NPH5 • GeneID - 50507 • NCBI - NP_058627

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-NOX4 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 67 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	1-2 µg/mL

Formulation

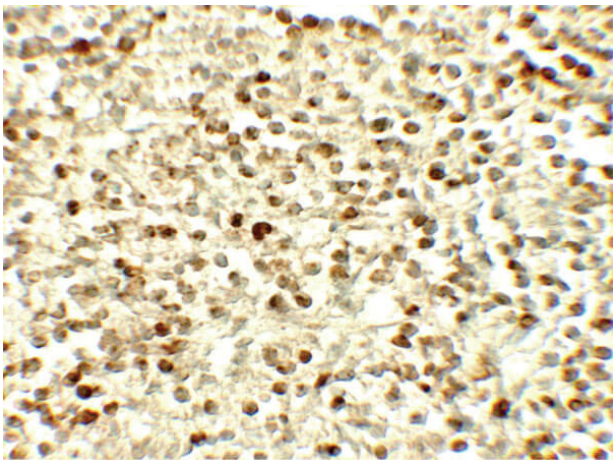
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

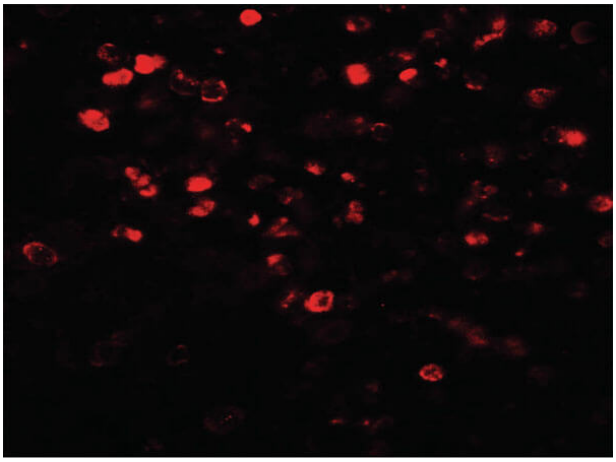
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several 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.

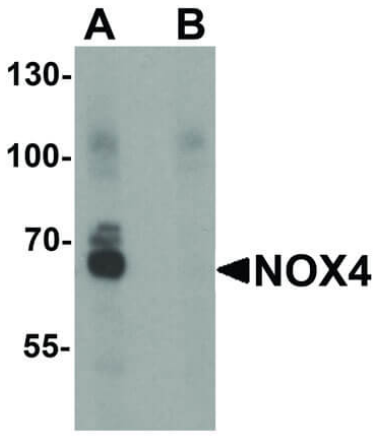
Images



Immunohistochemistry
Immunohistochemistry of Rabbit anti-NOX4 antibody. Tissue: human spleen. Primary antibody: NOX4 antibody at 5 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:5,000. Localization: NOX4 is located on the cell membrane and is sometimes nuclear. Staining: NOX4 as precipitated brown signal.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Rabbit anti-NOX4 antibody. Tissue: human spleen. Primary antibody: NOX4 antibody at 20 µg/mL. Secondary antibody: Fluorescein rabbit secondary antibody at 1:20,000. Localization: NOX4 is located on the cell membrane and is sometimes nuclear. Staining: NOX4 as red fluorescent signal.



Western Blot

Western Blot of Rabbit anti-NOX4 antibody. Lane A: Jurkat cell lysate in absence of blocking peptide. Lane B: Jurkat cell lysate in presence of blocking peptide. Primary antibody: NOX4 antibody at 1 µg/mL overnight at 4℃. Secondary antibody: Rabbit secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 64 kDa, 68 kDa for NOX4.

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.