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Datasheet for 600-401-DD9

NOX2 Antibody

Overview

Description:	Anti-NOX2 (RABBIT) Antibody - 600-401-DD9
Item No.:	600-401-DD9
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). NOX2, also known as cytochrome b beta (CYBB) is one of two proteins that make up Cytochrome b-245, thought to be a primary component of the microbicidal oxidase system of phagocytes. NOX2 deficiency is one of five described biochemical defects associated with chronic granulomatous disease (CGD) (2). Activation of the NOX2 enzyme complex in microglia is thought to be neurotoxic and may play a role in Alzheimer's and Parkinson's disease (3).
Synonyms:	NOX2 Antibody, CGD, NOX2, AMCBX2, GP91-1, GP91PHOX, p91-PHOX, GP91-PHOX, Cytochrome b-245 heavy chain, CGD91-phox, Cytochrome b558 subunit beta
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CYBB
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti- NOX2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid peptide near the N-terminus of human NOX2.

Purity/Specificity:	Anti-NOX2 antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. NOX2 antibody is human, mouse and rat reactive. At least two isoforms are known to exist; this antibody will detect both isoforms. NOX2 is predicted to not cross-react with other NOX proteins.
Relevant Links:	• UniProtKB - P04839 • GeneID - 1536 • NCBI - NP_000388

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-NOX2 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 65 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

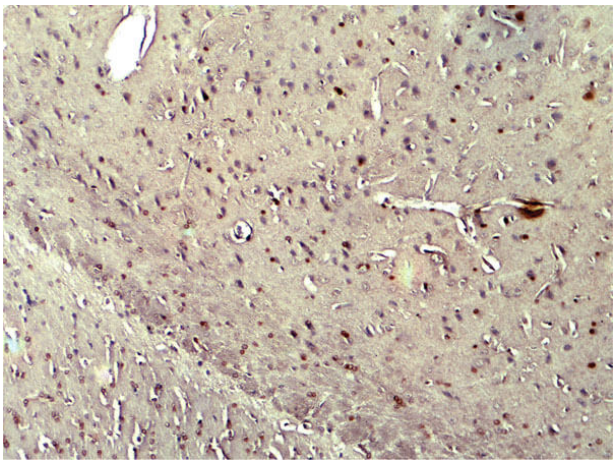
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

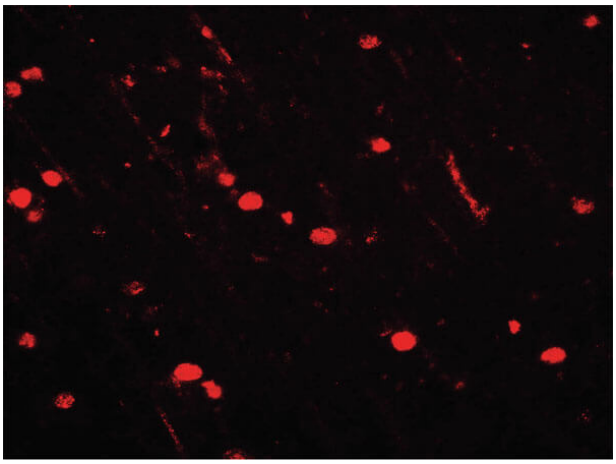
Shipping Condition:	Dry Ice

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.

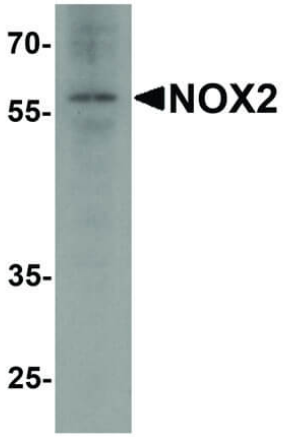
Images



Immunohistochemistry
Immunohistochemistry of Rabbit anti-NOX2 antibody. Tissue: rat brain. Primary antibody: NOX2 antibody at 5 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:5,000. Localization: NOX2 is located on the cell membrane. Staining: NOX2 as precipitated brown signal.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Rabbit anti-NOX2 antibody. Tissue: rat brain. Primary antibody: NOX2 antibody at 20 µg/mL. Secondary antibody: Fluorescein rabbit secondary antibody at 1:20,000. Localization: NOX2 is located on the cell membrane. Staining: NOX2 as red fluorescent signal.



Western Blot
Western Blot of Rabbit anti-NOX2 antibody. Lane A: rat brain tissue lysate. Primary antibody: NOX2 antibody at 1 µg/mL overnight at 4℃. Secondary antibody: Goat anti-Rabbit HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 59/63 kDa, 58 kDa for NOX2.

Disclaimer

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