

Anti-NOX1 Antibody

Catalog # ABO10981

Specification

Anti-NOX1 Antibody - Product Information

Application WB
Primary Accession Q9WV87
Host Rabbit
Reactivity Mouse, Rat
Clonality Polyclonal
Format Lyophilized

Description

Rabbit IgG polyclonal antibody for NADPH oxidase 1(NOX1) detection. Tested with WB, IHC-P in Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-NOX1 Antibody - Additional Information

Gene ID 114243

Other Names

NADPH oxidase 1, NOX-1, 1.-.--, Mitogenic oxidase 1, MOX-1, NADH/NADPH mitogenic oxidase subunit P65-MOX, NOH-1, Nox1, Mox1, Noh1

Calculated MW 65177 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Rat, Mouse, By Heat
br>Western blot, 0.1-0.5 μg/ml, Mouse, Rat
br>

Subcellular Localization

Cell projection, invadopodium membrane; Multi-pass membrane protein.

Tissue Specificity

Expressed in vascular smooth muscle cells.

Protein Name

NADPH oxidase 1(NOX-1)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of rat NOX1(417-431aa WYKFQRAHNKLKTQK), different from the related mouse sequence by one amino acid.



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.

Sequence Similarities

Contains 1 FAD-binding FR-type domain.

Anti-NOX1 Antibody - Protein Information

Name Nox1

Synonyms Mox1, Noh1

Function

NADPH oxidase that catalyzes the generation of superoxide from molecular oxygen utilizing NADPH as an electron donor.

Cellular Location

Cell projection, invadopodium membrane {ECO:0000250|UniProtKB:Q9Y5S8}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q9Y5S8}; Multi-pass membrane protein

Tissue Location

Expressed in vascular smooth muscle cells.

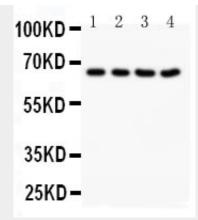
Anti-NOX1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

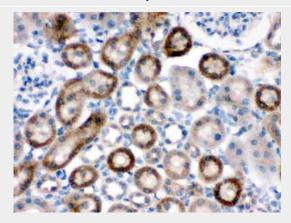
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NOX1 Antibody - Images





Anti-NOX1 antibody, ABO10981, Western blottingLane 1: Rat Heart Tissue LysateLane 2: Rat Brain Tissue LysateLane 3: Mouse Heart Tissue LysateLane 4: Mouse Heart Tissue Lysate



Anti-NOX1 antibody, ABO10981, HC(P)HC(P): Rat Kidney Tissue

Anti-NOX1 Antibody - Background

NOX1(NADPH OXIDASE 1), also known as NOH1, MOX1 or GP91-2, is an enzyme that in humans is encoded by the NOX1 gene. It is also a homolog of the catalytic subunit of the superoxide-generating NADPH oxidase of phagocytes, gp91phox. The NOX1 gene is mapped to Xq22.1. NOX1 was expressed in colon, prostate, uterus, and vascular smooth muscle, but not in peripheral blood leukocytes. The deduced 564-amino acid NOX1 protein, which is 58% identical to CYBB, contains 6 membrane-spanning regions, conserved flavin and pyridine nucleotide-binding sites, and histidines possibly involved in heme ligation. Overexpression of MOX1 in NIH 3T3 cells increased superoxide generation and cell growth. Cells expressing MOX1 had a transformed appearance, showed anchorage-independent growth, and produced tumors in athymic mice. Disruption of either Nox1 or Nox2 significantly delayed progression of motor neuron disease in these mice. However, 50% survival rates were enhanced significantly more by Nox2 deletion than Nox1 deletion.