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Anti-NOX1 Antibody
Catalog # ABO10981

Specification

Anti-NOX1 Antibody - Product Information

Application	**WB, IHC-P**
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

Western blot, 0.1-0.5 µg/ml, Mouse, Rat

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

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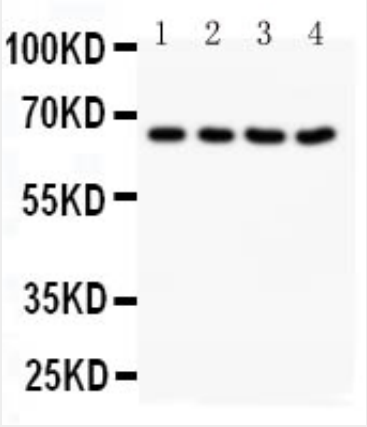
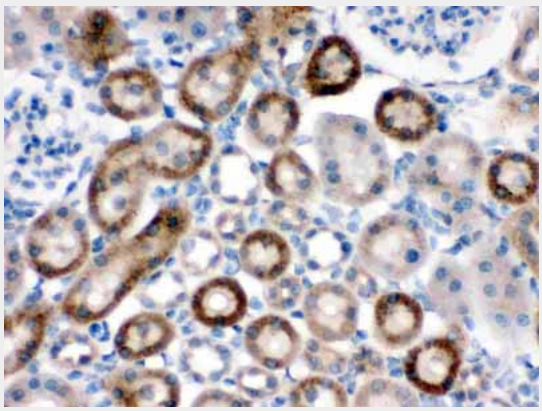


Anti-NOX1 antibody, ABO10981, Western blottingLane 1: Rat Heart Tissue LysateLane 2: Rat Brain Tissue LysateLane 3: Mouse Heart Tissue LysateLane 4: Mouse Heart Tissue Lysate



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.