10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-NOX1 Antibody

Catalog # ABO10981

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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Mouse, Rat
Subcellular Localization	Cell projection, invadopodium membrane ; Multi-pass membrane protein .
Tissue Specificity	Expressed in vascular smooth muscle cells.
Source	Eukaryota
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.

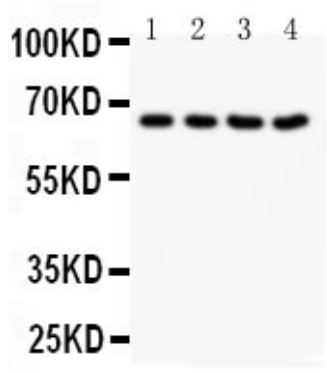
Protein Information

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.

Background

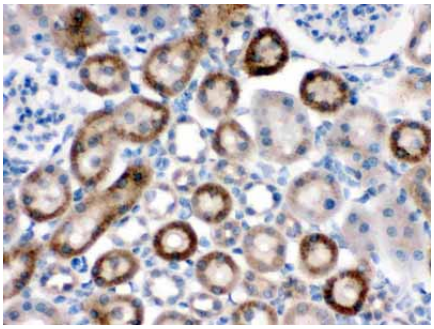
NOX1(NADPH OXIDASE 1), also known as NOH1, MOX1 or GP91-2, is an enzyme that in humans is encoded by the NOX1 gene. It is also a homolog of the catalytic subunit of the superoxide-generating NADPH oxidase of phagocytes, gp91phox. The NOX1 gene is mapped to Xq22.1. NOX1 was expressed in colon, prostate, 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.

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.