

NOX1 Antibody
Catalog # ASC11832**Specification**

NOX1 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q9Y5S8
Other Accession	NP_008983 , 148536873
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 62 kDa

Application Notes	Observed: 64 kDa KDa NOX1 antibody can be used for detection of NOX1 by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.
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NOX1 Antibody - Additional Information

Gene ID	27035
Target/Specificity	
NOX1; NOX1 antibody is human specific.	

Reconstitution & Storage

NOX1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

NOX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

Tissue Location

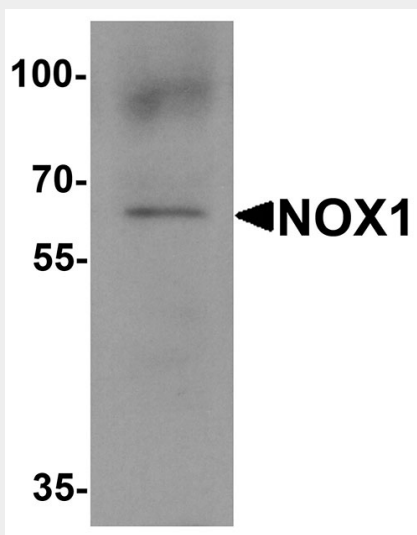
[Isoform NOH-1L]: Detected in colon, uterus, prostate, and colon carcinoma, but not in peripheral blood leukocytes

NOX1 Antibody - Protocols

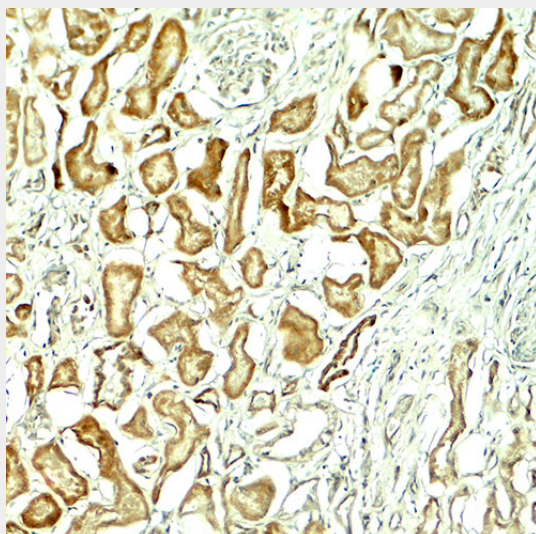
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

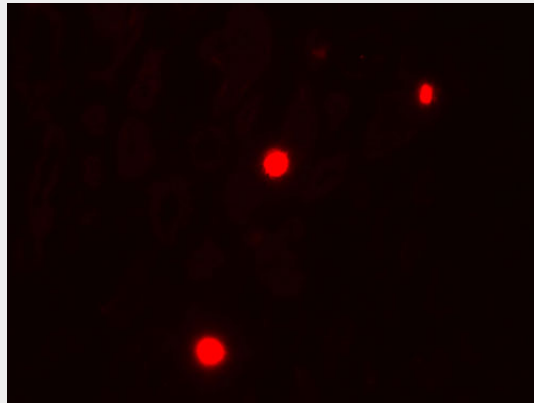
NOX1 Antibody - Images



Western blot analysis of NOX1 in 293 cell lysate with NOX1 antibody at 1 µg/ml.



Immunohistochemistry of NOX1 in human kidney tissue with NOX1 antibody at 5 µg/ml.



Immunofluorescence of NOX1 in human kidney tissue with NOX1 antibody at 20 µg/ml.

NOX1 Antibody - Background

Voltage-gated proton (hydrogen) channels play an important role in cellular defense against acidic stress (1). NOX1 is a homolog of the catalytic subunit of the superoxide-generating NADPH oxidase of phagocytes, gp91phox (1). Three splice variants of NOX1 have been identified, NOH-1L, NOH-1S and NOH-1Lv (2). NOH-1S is a voltage-gated proton channel that participates in the regulation of cellular pH and is blocked by zinc. NOH-1L is a pyridine nucleotide-dependent oxidoreductase that generates superoxide and might conduct H(+) ions as part of its electron transport mechanism, whereas NOH-1S does not contain an electron transport chain (1-3). NOX1 have the potential to be effective treatments for a range of ischemic diseases (4).

NOX1 Antibody - References

Helmcke I, Heumuller S, Tikkanen R, et al. Identification of structural elements in Nox1 and Nox4 controlling localization and activity. *Antioxid. Redox Signal.* 2009; 11:1279-87.
Piccoli C, D'Aprile A, Ripoli M, et al. Bone-marrow derived hematopoietic stem/progenitor cells express multiple isoforms of NADPH oxidase and produce constitutively reactive oxygen species. *Biochem. Biophys. Res. Commun.* 2007; 353:965-72.
Lee JG, Lim EJ, Park DW, et al. A combination of Lox-1 and Nox1 regulates TLR9-mediated foam cell formation. *Cell Signal.* 2008; 20:2266-75.
Stanic B, Katsuyama M, and Miller FJ Jr. An oxidized extracellular oxidation-reduction state increases Nox1 expression and proliferation in vascular smooth muscle cells via epidermal growth factor receptor activation. *Arterioscler. Thromb. Vasc. Biol.* 2010; 30:2234-41.