

**NOX4 Antibody**  
Rabbit mAb  
Catalog # AP90299

## Specification

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### NOX4 Antibody - Product Information

Application	WB, IHC, ICC, IP
Primary Accession	<a href="#">O9NPH5</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
NADPH oxidase 4; Kidney oxidase-1; KOX-1; KOX1; Kidney superoxide-producing NADPH oxidase; Renal NAD(P)H-oxidase; NOX4; RENOX;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	66932 Da

### NOX4 Antibody - Additional Information

Purification	<b>Affinity-chromatography</b>
Immunogen	<b>A synthesized peptide derived from human NOX4</b>
Description	<b>The superoxide-generating NADPH oxidase includes a membrane-bound flavocytochrome containing two subunits, gp91-phox and p22-phox, and the cytosolic proteins p47-phox and p67-phox. During activation of the NADPH oxidase, p47-phox and p67-phox migrate to the plasma membrane where they associate with the flavocytochrome, cytochrome b558, to form the active enzyme complex.</b>
Storage Condition and Buffer	<b>Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.</b>

### NOX4 Antibody - Protein Information

**Name** NOX4

**Synonyms** RENOX

#### **Function**

NADPH oxidase that catalyzes predominantly the reduction of oxygen to H<sub>2</sub>O<sub>2</sub> (PubMed:<a href="http://www.uniprot.org/citations/14966267" target="\_blank">14966267</a>, PubMed:<a href="http://www.uniprot.org/citations/15356101" target="\_blank">15356101</a>, PubMed:<a href="http://www.uniprot.org/citations/15356101" target="\_blank">15356101</a>)

href="http://www.uniprot.org/citations/15927447" target="\_blank">15927447</a>, PubMed:<a href="http://www.uniprot.org/citations/21343298" target="\_blank">21343298</a>, PubMed:<a href="http://www.uniprot.org/citations/25062272" target="\_blank">25062272</a>). Can also catalyze to a smaller extent, the reduction of oxygen to superoxide (PubMed:<a href="http://www.uniprot.org/citations/10869423" target="\_blank">10869423</a>, PubMed:<a href="http://www.uniprot.org/citations/11032835" target="\_blank">11032835</a>, PubMed:<a href="http://www.uniprot.org/citations/15155719" target="\_blank">15155719</a>, PubMed:<a href="http://www.uniprot.org/citations/15572675" target="\_blank">15572675</a>, PubMed:<a href="http://www.uniprot.org/citations/15927447" target="\_blank">15927447</a>, PubMed:<a href="http://www.uniprot.org/citations/16019190" target="\_blank">16019190</a>, PubMed:<a href="http://www.uniprot.org/citations/16179589" target="\_blank">16179589</a>, PubMed:<a href="http://www.uniprot.org/citations/16230378" target="\_blank">16230378</a>, PubMed:<a href="http://www.uniprot.org/citations/16324151" target="\_blank">16324151</a>, PubMed:<a href="http://www.uniprot.org/citations/25062272" target="\_blank">25062272</a>). May function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity (PubMed:<a href="http://www.uniprot.org/citations/16019190" target="\_blank">16019190</a>). May regulate insulin signaling cascade (PubMed:<a href="http://www.uniprot.org/citations/14966267" target="\_blank">14966267</a>). May play a role in apoptosis, bone resorption and lipopolysaccharide-mediated activation of NFkB (PubMed:<a href="http://www.uniprot.org/citations/15356101" target="\_blank">15356101</a>, PubMed:<a href="http://www.uniprot.org/citations/15572675" target="\_blank">15572675</a>). May produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation (PubMed:<a href="http://www.uniprot.org/citations/16324151" target="\_blank">16324151</a>).

#### Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cell junction, focal adhesion {ECO:0000250|UniProtKB:Q924V1}. Nucleus [Isoform 3]: Cytoplasm. Cytoplasm, perinuclear region [Isoform 6]: Cytoplasm. Cytoplasm, perinuclear region

#### Tissue Location

Expressed by distal tubular cells in kidney cortex and in endothelial cells (at protein level). Widely expressed. Strongly expressed in kidney and to a lower extent in heart, adipocytes, hepatoma, endothelial cells, skeletal muscle, brain, several brain tumor cell lines and airway epithelial cells

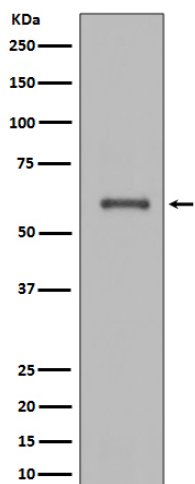
#### NOX4 Antibody - Protocols

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](#)

#### NOX4 Antibody - Images





Western blot analysis of NOX4 expression in JAR cell lysate.