

NOX4 Antibody
Rabbit mAb
Catalog # AP90299

Specification

NOX4 Antibody - Product Information

Application	WB, IHC, ICC, IP
Primary Accession	O9NPH5
Reactivity	Rat
Clonality	Monoclonal
Other Names	
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	Affinity-chromatography
Immunogen	A synthesized peptide derived from human NOX4
Description	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.
Storage Condition and Buffer	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.

NOX4 Antibody - Protein Information

Name NOX4

Synonyms RENOX

Function

NADPH oxidase that catalyzes predominantly the reduction of oxygen to H₂O₂ (PubMed:14966267, PubMed:15356101, PubMed:15356101)

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

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

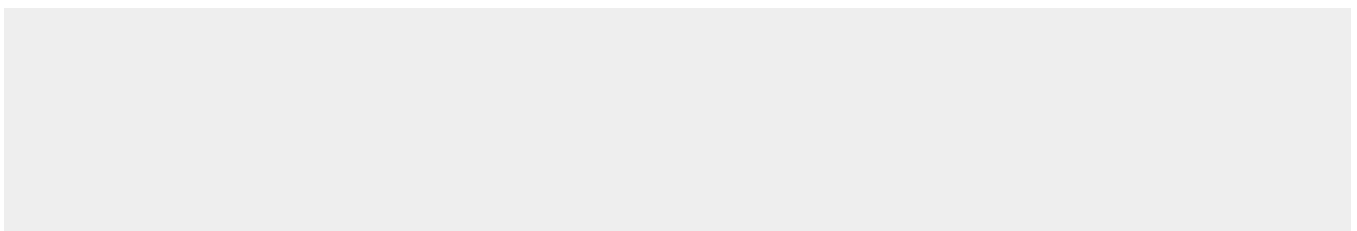
Expressed by distal tubular cells in kidney cortex and in endothelial cells (at protein level). Widely expressed. Strongly expressed in kidney and to a lower extent in heart, adipocytes, hepatoma, endothelial cells, skeletal muscle, brain, several brain tumor cell lines and airway epithelial cells

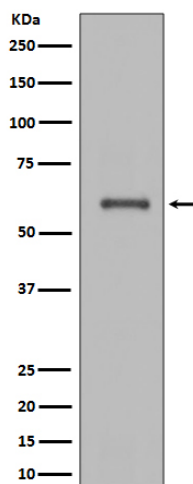
NOX4 Antibody - Protocols

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.