

NOX4 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52013**Specification**

NOX4 Antibody - Product Information

| | |
|-------------------|--------------------------|
| Application | WB, E |
| Primary Accession | O9NPH5 |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 67 KDa |

NOX4 Antibody - Additional Information**Gene ID** 50507**Other Names**

NADPH oxidase 4, 163-, Kidney oxidase-1, KOX-1, Kidney superoxide-producing NADPH oxidase, Renal NAD(P)H-oxidase, NOX4, RENOX

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

NOX4 Antibody - Protein Information**Name** NOX4**Synonyms** RENOX**Function**

NADPH oxidase that catalyzes predominantly the reduction of oxygen to H₂O₂ (PubMed: [14966267](http://www.uniprot.org/citations/14966267), PubMed: [15356101](http://www.uniprot.org/citations/15356101), PubMed: [15927447](http://www.uniprot.org/citations/15927447), PubMed: [21343298](http://www.uniprot.org/citations/21343298), PubMed: [25062272](http://www.uniprot.org/citations/25062272)). Can also catalyze to a smaller extent, the reduction of oxygen to superoxide (PubMed: [10869423](http://www.uniprot.org/citations/10869423), PubMed: [11032835](http://www.uniprot.org/citations/11032835), PubMed: [15155719](http://www.uniprot.org/citations/15155719), PubMed: [15572675](http://www.uniprot.org/citations/15572675), PubMed: [15927447](http://www.uniprot.org/citations/15927447), PubMed: [16019190](http://www.uniprot.org/citations/16019190), PubMed: [16179589](http://www.uniprot.org/citations/16179589)).

[16230378](http://www.uniprot.org/citations/16230378), PubMed: [16324151](http://www.uniprot.org/citations/16324151), PubMed: [25062272](http://www.uniprot.org/citations/25062272)). May function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity (PubMed: [16019190](http://www.uniprot.org/citations/16019190)). May regulate insulin signaling cascade (PubMed: [14966267](http://www.uniprot.org/citations/14966267)). May play a role in apoptosis, bone resorption and lipopolysaccharide-mediated activation of NFkB (PubMed: [15356101](http://www.uniprot.org/citations/15356101), PubMed: [15572675](http://www.uniprot.org/citations/15572675)). May produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation (PubMed: [16324151](http://www.uniprot.org/citations/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

NOX4 Antibody - Background

Constitutive NADPH oxidase which generates superoxide intracellularly upon formation of a complex with CYBA/p22phox. Regulates signaling cascades probably through phosphatases inhibition. May function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity. May regulate insulin signaling cascade. May play a role in apoptosis, bone resorption and lipopolysaccharide-mediated activation of NFkB. May produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation. Isoform 3 is not functional. Isoform 4 displays an increased activity. Isoform 5 and isoform 6 display reduced activity.

NOX4 Antibody - References

Geiszt M., et al. Proc. Natl. Acad. Sci. U.S.A. 97:8010-8014(2000).
Cheng G., et al. Gene 269:131-140(2001).
Shiose A., et al. J. Biol. Chem. 276:1417-1423(2001).
Schwarzer C., et al. J. Biol. Chem. 279:36454-36461(2004).
Goyal P., et al. Biochem. Biophys. Res. Commun. 329:32-39(2005).

