

**Rabbit Anti-NADPH oxidase 4 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP52323****Specification****Rabbit Anti-NADPH oxidase 4 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">Q9JHI8</a>
Reactivity	Human, Mouse, Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66519

**Rabbit Anti-NADPH oxidase 4 Polyclonal Antibody - Additional Information****Gene ID** 50490**Other Names**

AI64821; NADPH oxidase 4; Kidney oxidase-1; KOX-1; Kidney superoxide-producing NADPH oxidase; Renal NAD(P)H-oxidase; Superoxide-generating NADPH oxidase 4; Nox4; Renox

**Dilution**<span class = "dilution\_WB">WB~1:100~1:500</span><br \><span class = "dilution\_IHC-P">IHC-P~1:100~1:500</span>**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Rabbit Anti-NADPH oxidase 4 Polyclonal 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> (By similarity). Can also catalyze to a smaller extent, the reduction of oxygen to superoxide (PubMed: [10869423](http://www.uniprot.org/citations/10869423), PubMed: [11098048](http://www.uniprot.org/citations/11098048), PubMed: [15638999](http://www.uniprot.org/citations/15638999)). May function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity (By similarity). May regulate insulin signaling cascade (By similarity). May play a role in apoptosis, bone resorption and lipopolysaccharide- mediated activation of NFκB (By similarity). May produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation (By

similarity).

#### Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9NPH5}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q9NPH5}; Multi-pass membrane protein. Cell junction, focal adhesion {ECO:0000250|UniProtKB:Q924V1}. Nucleus {ECO:0000250|UniProtKB:Q9NPH5}

#### Tissue Location

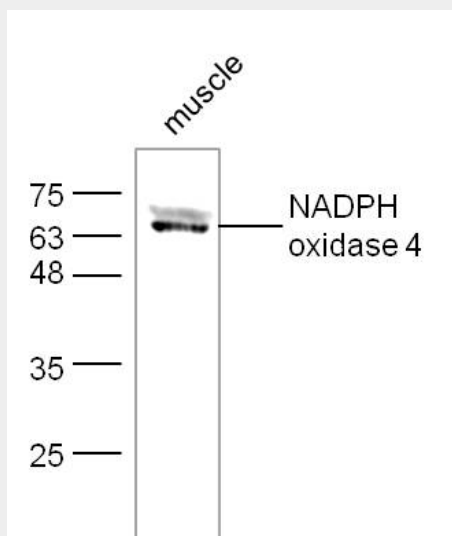
Expressed in brain, in all layers of the cerebellum, in pyramidal cells of the Ammon horn and in Purkinje cells (at protein level). Expressed in osteoclasts, leukocytes, kidney, liver and lung.

### Rabbit Anti-NADPH oxidase 4 Polyclonal Antibody - Protocols

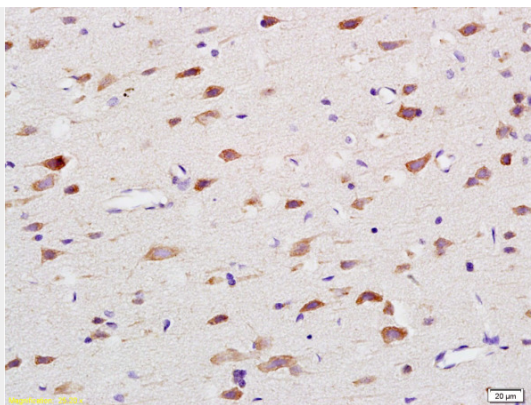
Provided below are standard protocols that you may find useful for product applications.

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

### Rabbit Anti-NADPH oxidase 4 Polyclonal Antibody - Images



Mouse muscle lysates probed with Rabbit Anti-NADPH oxidase 4 Polyclonal Antibody, Unconjugated (AP52323) at 1:300 overnight at 4°C. Followed by conjugation to secondary antibody at 1:500 for 90 min at 37°C.



Formalin-fixed and paraffin embedded rat brain labeled with Anti-Nox4/NADH Polyclonal Antibody, Unconjugated (AP52323) at 1:200 followed by conjugation to the secondary antibody and DAB staining.

#### **Rabbit Anti-NADPH oxidase 4 Polyclonal 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 NFκB.