

## NADPH oxidase 4/NOX4 Rabbit mAb

Catalog No: #48782

Package Size: #48782-1 50ul #48782-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

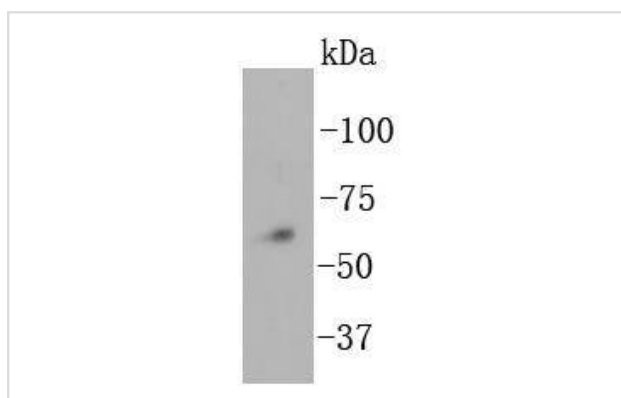
## Description

|                       |   |
|-----------------------|---|
| Product Name          | NADPH oxidase 4/NOX4 Rabbit mAb   |
| Host Species          | Recombinant Rabbit  |
| Clonality             | Monoclonal antibody   |
| Clone No.             | SY0214  |
| Purification          | ProA affinity purified  |
| Applications          | WB, ICC, IHC, IP  |
| Species Reactivity    | Hu, Ms, Rt  |
| Immunogen Description | recombinant protein   |
| Other Names           | Kidney oxidase-1 antibody Kidney superoxide-producing NADPH oxidase antibody KOX 1 antibody KOX antibody Kox-1 antibody NADPH antibody NADPH oxidase 4 antibody Nox4 antibody NOX4_HUMAN antibody Renal NAD(P)H-oxidase antibody RENOX antibody |
| Accession No.         | Swiss-Prot#:Q9NPH5  |
| Uniprot               | Q9NPH5  |
| GeneID                | 50507;  |
| Calculated MW         | 67 kDa  |
| Formulation           | 1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.  |
| Storage               | Store at -20°C  |

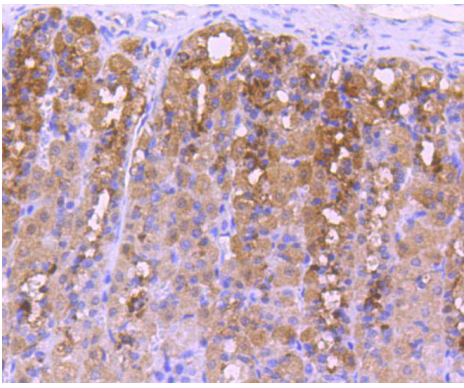
## Application Details

WB: 1:1,000 IHC: 1:50-1:200 ICC: 1:50-1:100

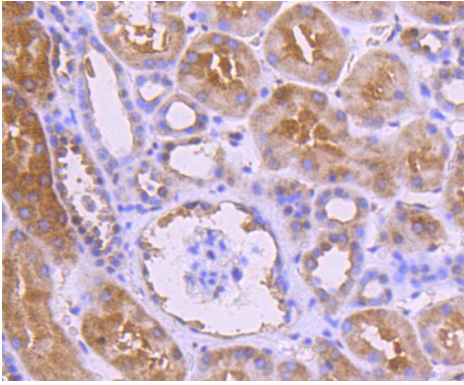
## Images



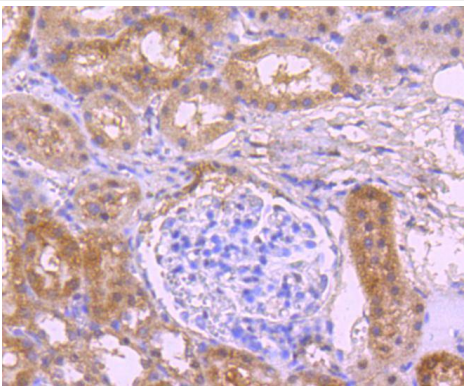
Western blot analysis of NOX4 on PC-12 cell lysates using anti-NOX4 antibody at 1/1,000 dilution.



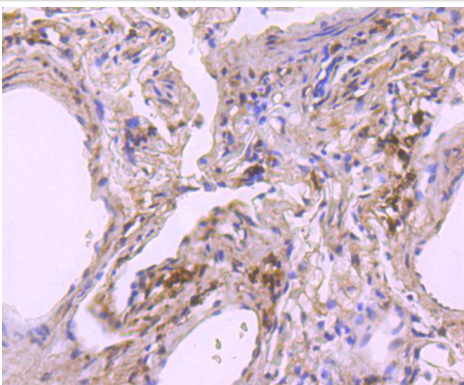
Immunohistochemical analysis of paraffin-embedded rat stomach tissue using anti-NOX4 antibody. Counter stained with hematoxylin.



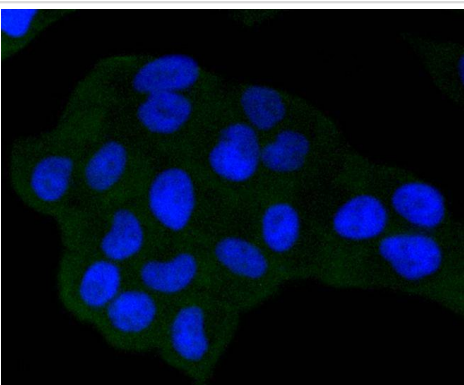
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-NOX4 antibody. Counter stained with hematoxylin.



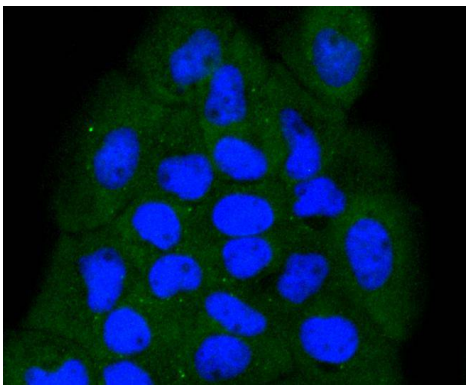
Immunohistochemical analysis of paraffin-embedded rat kidney tissue using anti-NOX4 antibody. Counter stained with hematoxylin.



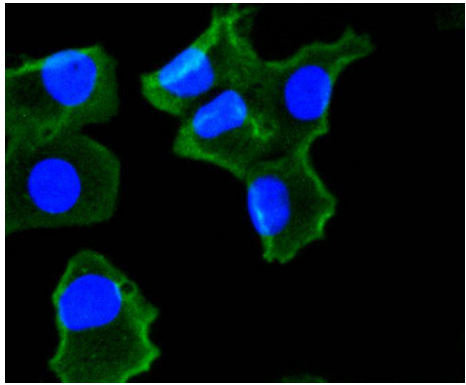
Immunohistochemical analysis of paraffin-embedded human lung tissue using anti-NOX4 antibody. Counter stained with hematoxylin.



ICC staining NOX4 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining NOX4 in A431 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining NOX4 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

## Background

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. The p22 and gp91-phox subunits also function as surface O<sub>2</sub> sensors that initiate cellular signaling in response to hypoxic conditions. Nox4 (also known as Renox) is a renal gp91-phox homolog highly expressed at the site of erythropoietin production in the proximal convoluted tubule epithelial cells of the renal cortex. Nox4 is also expressed in fetal tissues, placenta, glioblastoma and vascular cells. Like gp91-phox, the enzymatic activity of Nox4 produces superoxide anions. In vascular cells, the addition of Angiotensin II increases Nox4 expression, which suggests a role for Nox4 in vascular oxidative stress response. The gene encoding human Nox4 maps to chromosome 11q14.2-q21.

## References

Note: This product is for in vitro research use only