



## Mouse Monoclonal Antibody **NADPH oxidase 4** conjugated to Sepharose Beads

CatalogNo: **ANT8112-M**

Size 200ul

Storage Store at 4 °C for frequent use

### Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified beads. It is useful for immunoprecipitation.

### **NADPH oxidase 4 (ANT0081R) Rabbit mAb**

Formulation: Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg ANaN3.

#### Host Species

- Rabbit
- Human, Mouse, Rat,

#### Reactivity

- WB, IF, IP, ELISA

#### Applications

#### MW

- 67kD (Calculated)
- IgG, Kappa
- 67kD (Observed)

#### Isotype

## Recommended Dilution Ratios

IP

### Basic Information

Clonality	Monoclonal
Clone Number	ANT0081R

### Immunogen Information

Specificity Endogenous

# Target Information

Gene name

NOX4 RENOX

Protein Name

NADPH oxidase 4 (Kidney oxidase-1) (KOX-1) (Kidney superoxide-producing NADPH oxidase) (Renal NAD(P)H-oxidase)

Organism	Gene ID	UniProt ID
Human	<a href="#">50507</a> ;	<a href="#">Q9NPH5</a> ;
Mouse		<a href="#">Q9JHI8</a> ;
Rat		<a href="#">Q924V1</a> ;

Cellular

Localization

Cytoplasm

Tissue specificity

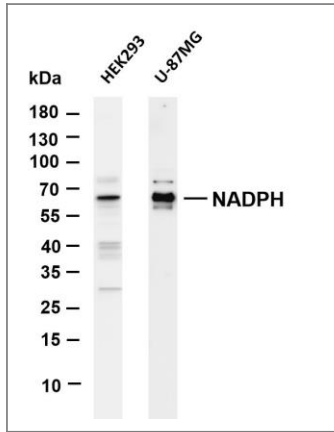
Expressed by distal tubular cells in kidney cortex and in endothelial cells (at protein level).

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.

Function

developmental stage:Expressed in fetal kidney and fetal liver.,enzyme regulation:Inhibited by plumbagin (By similarity). Activated by phorbol 12-myristate 13-acetate (PMA). Activated by insulin. Inhibited by diphenylene iodonium.,Function: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. Isoform 3 is not functional. Isoform 4 displays an increased activity while isoform 5 and isoform 6 display reduced activity. May produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation.,induction:By 7-ketocholesterol (at protein level).,ANTM:Isoform 3 and isoform 4 are N-glycosylated. Isoform 4 glycosylation is required for its proper function.,similarity:Contains 1 FAD-binding FR-type domain.,similarity:Contains 1 ferric oxidoreductase domain.,subcellular location:May localize to plasma membrane and focal adhesions. May also localize to the nucleus (PubMed:15927447).,subunit:Interacts with protein disulfide isomerase (By similarity). Interacts with, relocalizes and stabilizes CYBA/p22phox. Interacts with TLR4.,tissue specificity: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.,

## Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-NADPH (ANT0081R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: U-87MG Predicted band size: 67kDa Observed band size: 67kDa

Please scan the QR code to access additional product information:

**NADPH oxidase 4  
(ANT0081R)  
Rabbit mAb**

For Research use only, not for diagnostics and clinical use  
Contact Antagene Inc Tel 1-866-964-2589 Email: [info@antageneinc.com](mailto:info@antageneinc.com)