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# NADPH oxidase 4 (ANT0081R) Rabbit mAb

CatalogNo: ANT8112 Recombinant R

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA

Quantity: 100 ug/vial

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat,
 WB, IF, IP, ELISA

MW Isotype

• 67kD (Calculated) • IgG,Kappa

67kD (Observed)

### Recommended Dilution Ratios

WB 1:1000-5000 IF 1:200-1000

ELISA 1:5000-20000

IP 1:50-200

## Storage

Storage\* -15°C to -25°C/1 year(Do not lower than -25°C)

#### **Basic Information**

**Clonality** Monoclonal

Clone Number ANT0081R

### Immunogen Information

**Specificity** Endogenous

# **Target Information**

#### Gene name Protein Name

NOX4 RFNOX

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

Organism	Gene ID	UniProt ID
Human	<u>50507</u> ;	Q9NPH5;
Mouse		<u>Q9JHI8</u> ;
Rat		<u>Q924V1</u> ;

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**

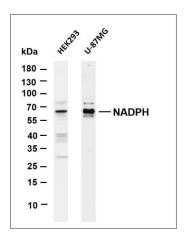
developmental stage:Expressed in fetal kidney and fetal liver.,enzyme regulation:Inhibited by plumbagin (By similarity). Activated by phorbol 12-myristate 13-acetate (PMA). Activated by insulin. Inhibited by diphenylene iodonium., Function: Constitutive NADPH oxidase which generates superoxide intracellularly 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 lipolysaccharide-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 (ANTO081R) 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



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Contact Antagene Inc Tel 1-866-964-2589 Email: info@antageneinc.com