



Rabbit Anti-NADPH oxidase 4 antibody

SL1091R

Product Name:	NADPH oxidase 4
Chinese Name:	NADPH氧化酶4抗体
Alias:	KOX 1; KOX; Nox 4; Nox-4; NADPH oxidase 4; RENOX; Kidney oxidase-1; Kidney superoxide-producing NADPH oxidase; Kox-1; NADPH; Nox4; NOX4_HUMAN; Renal NAD(P)H-oxidase; RENOX.
文献引用 PubMed :	Specific References(1) SL1091R has been referenced in 1 publications. [IF=2.13] Khan, Aslam, Karen Byer, and Saeed R. Khan. "Exposure of Madin-Darby Canine Kidney (MDCK) Cells to Oxalate and Calcium Oxalate Crystals Activates Nicotinamide Adenine Dinucleotide Phosphate (NADPH)-Oxidase." Urology 83.2 (2014): 510-e1. WB;Dog. PubMed:24360063
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	64kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Nox-4:81-180/578<Cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	<p>Nox4 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 Nox-4 in vascular oxidative stress response.</p> <p>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.</p> <p>Subunit: Interacts with, relocalizes and stabilizes CYBA/p22phox. Interacts with TLR4. Interacts with protein disulfide isomerase.</p> <p>Subcellular Location: Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell junction, focal adhesion. Cell membrane. Note=May localize to plasma membrane and focal adhesions.</p> <p>Tissue Specificity: 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.</p> <p>Similarity: Contains 1 FAD-binding FR-type domain. Contains 1 ferric oxidoreductase domain.</p> <p>SWISS: Q9JHI8</p> <p>Gene ID: 50507</p> <p>Database links: Entrez Gene: 50507 Human</p>

[Entrez Gene: 50490](#) Mouse

[Entrez Gene: 85431](#) Rat

[Omim: 605261](#) Human

[SwissProt: Q9NPH5](#) Human

[SwissProt: Q9JHI8](#) Mouse

[SwissProt: Q924V1](#) Rat

[Unigene: 371036](#) Human

[Unigene: 31748](#) Mouse

[Unigene: 14744](#) Rat

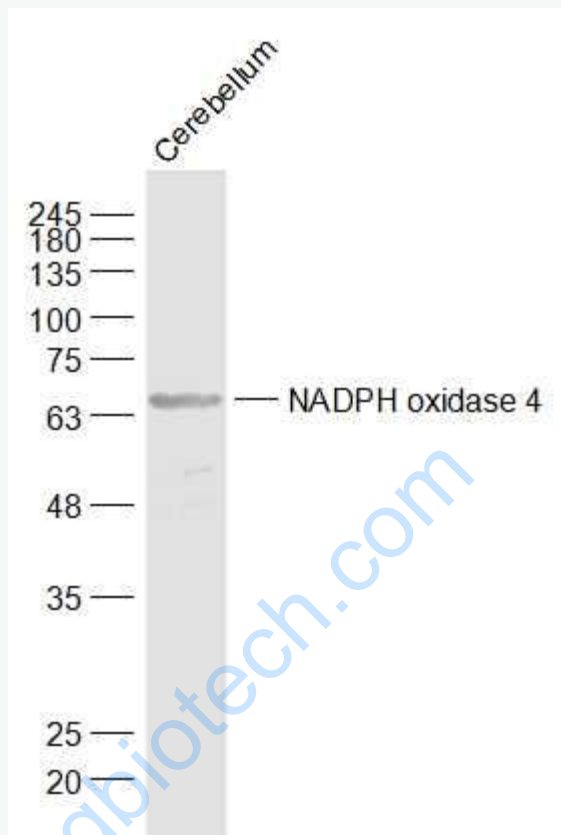
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

还原型辅酶烟酰胺腺嘌呤二核苷酸磷酸(NADPH)oxidase

4:还原型辅酶烟酰胺腺嘌呤二核苷酸(Nicotinamide adenine dinucleotide reduced, NADH)位于Mitochondrion膜内, 是细胞能量代谢所必需的辅酶, 主要功能是经电子传递链产生ATP。NADH在维持细胞生长、分化和能量代谢中起重要的作用。

Picture:



Sample:

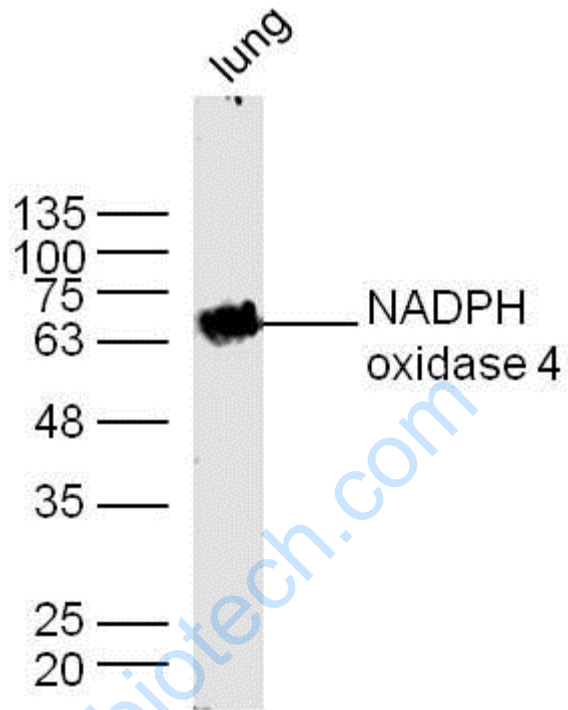
Cerebellum (Mouse) Lysate at 40 ug

Primary: Anti-NADPH oxidase 4 (SL1091R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 64 kD

Observed band size: 64 kD



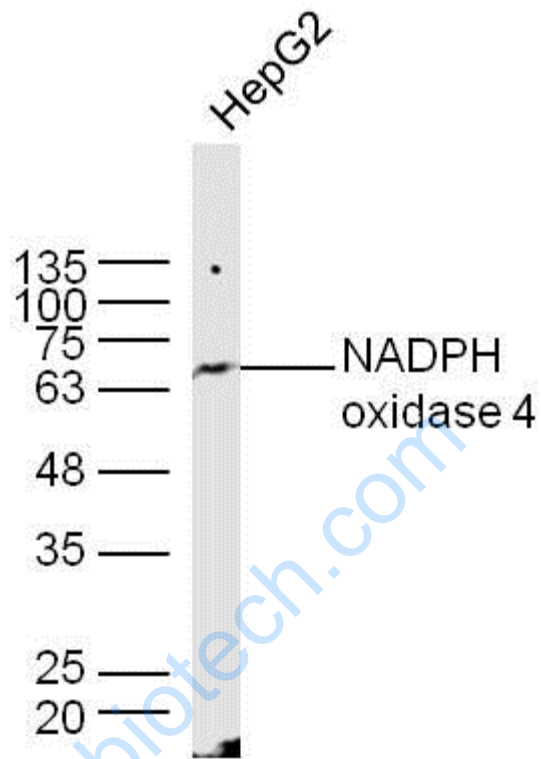
Sample: Lung (Mouse) Lysate at 40 ug

Primary: Anti- NADPH oxidase4 (SL1091R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 64 kD

Observed band size: 64 kD



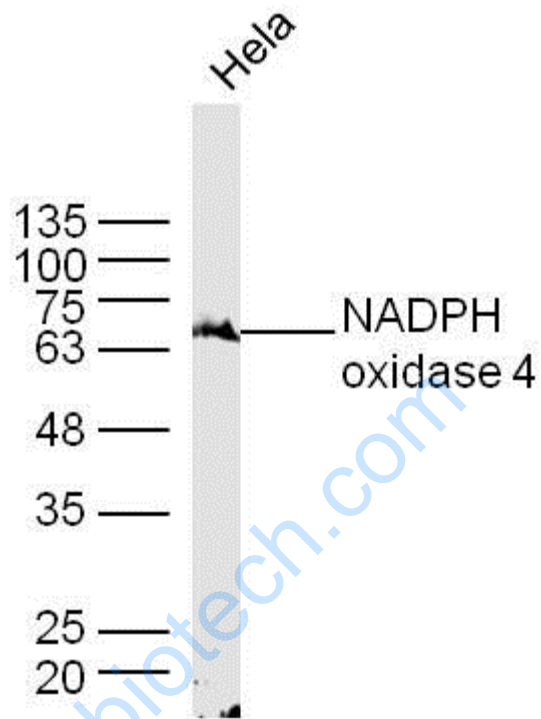
Sample: HepG2 Cell Lysate at 40 ug

Primary: Anti- NADPH oxidase 4(SL1091R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 64 kD

Observed band size: 64 kD



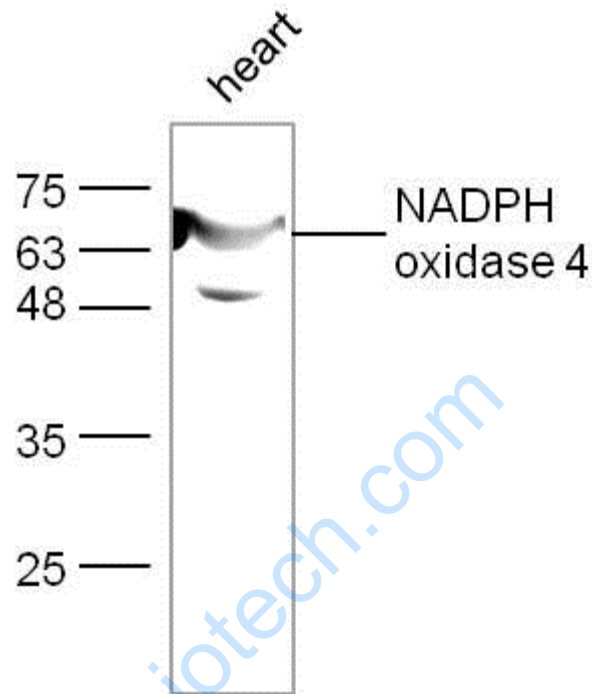
Sample: HeLa Cell Lysate at 40 ug

Primary: Anti- NADPH oxidase 4 (SL1091R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 64 kD

Observed band size: 64 kD



Sample:

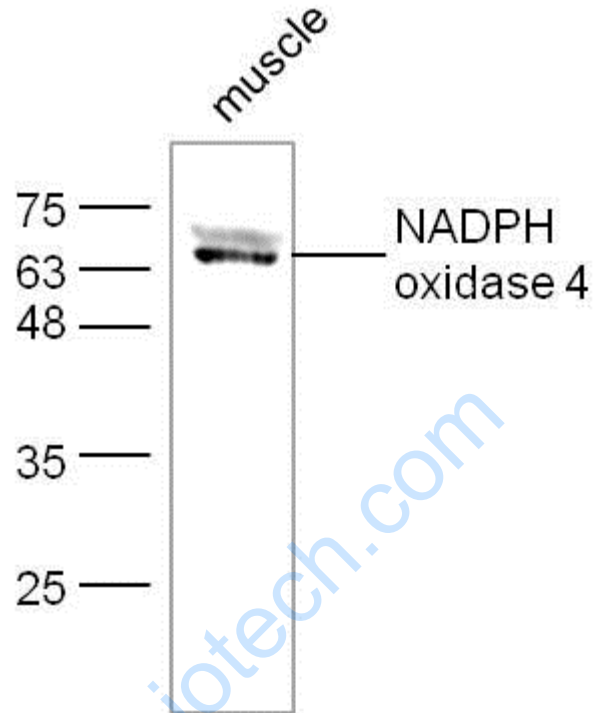
heart (Mouse) Lysate at 40 ug

Primary: Anti-NADPH oxidase 4 (SL1091R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 64 kD

Observed band size: 64 kD



Sample:

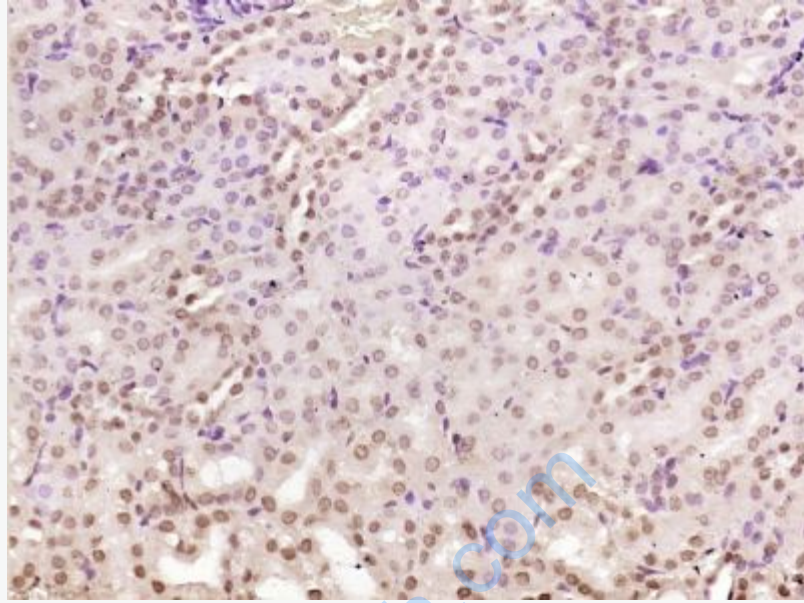
muscle (Mouse) Lysate at 40 ug

Primary: Anti-NADPH oxidase 4 (SL1091R) at 1/300 dilution

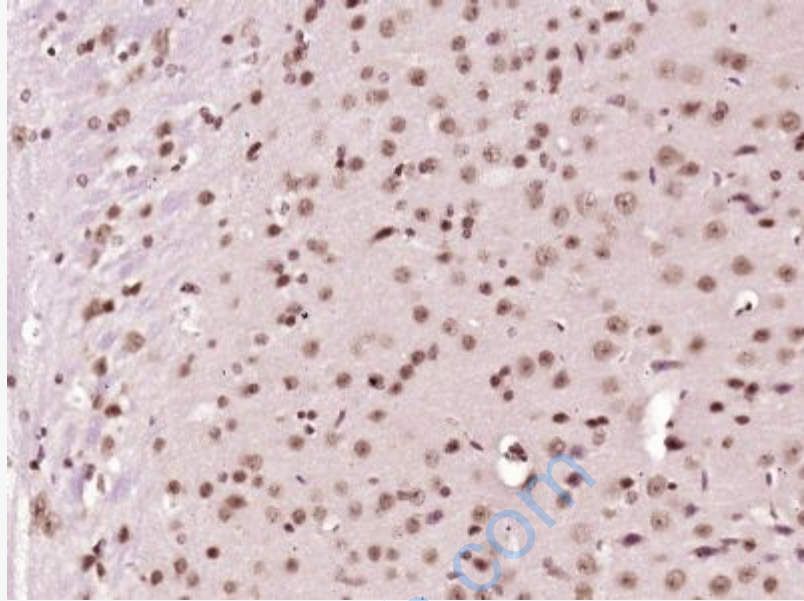
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 64 kD

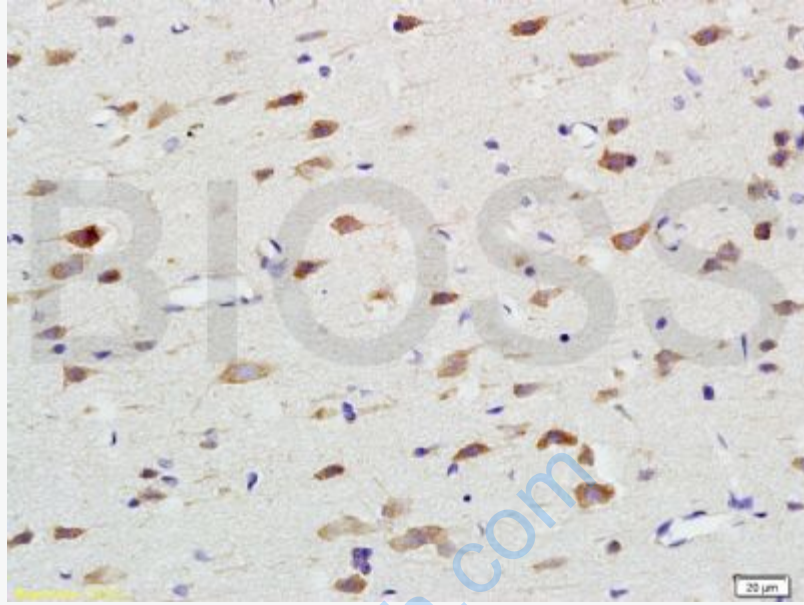
Observed band size: 64 kD



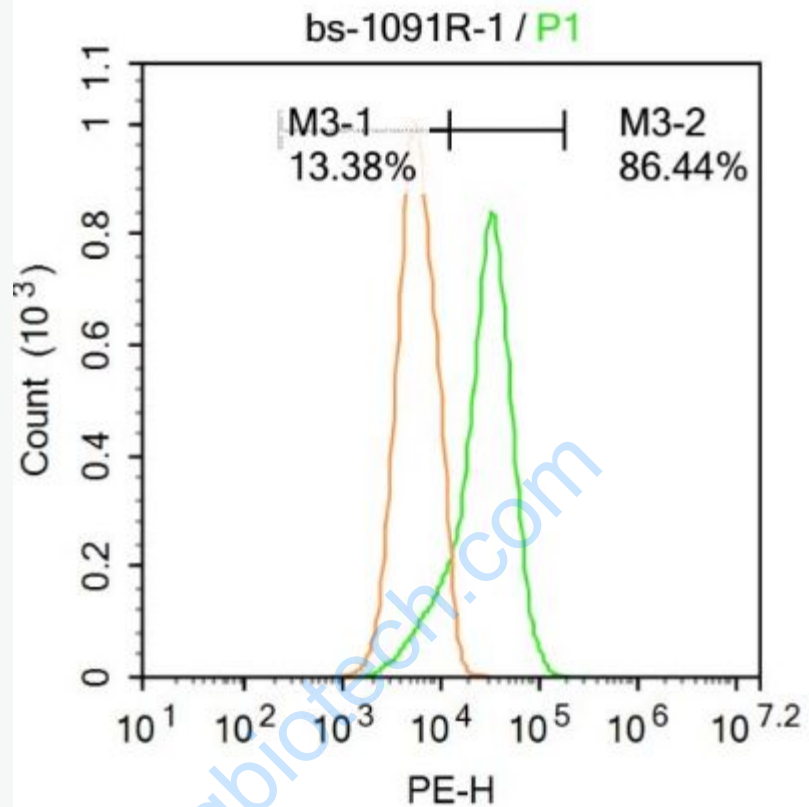
Paraformaldehyde-fixed, paraffin embedded (Mouse kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NADPH oxidase 4) Polyclonal Antibody, Unconjugated (SL1091R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NADPH oxidase 4) Polyclonal Antibody, Unconjugated (SL1091R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-Nox4 Polyclonal Antibody, Unconjugated(SL1091R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: Raji.

Primary Antibody (green line): Rabbit Anti-NADPH oxidase 4 antibody (SL1091R)

Dilution: $1\mu\text{g}/10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: $1\mu\text{g}/\text{test}$.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room

temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.

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