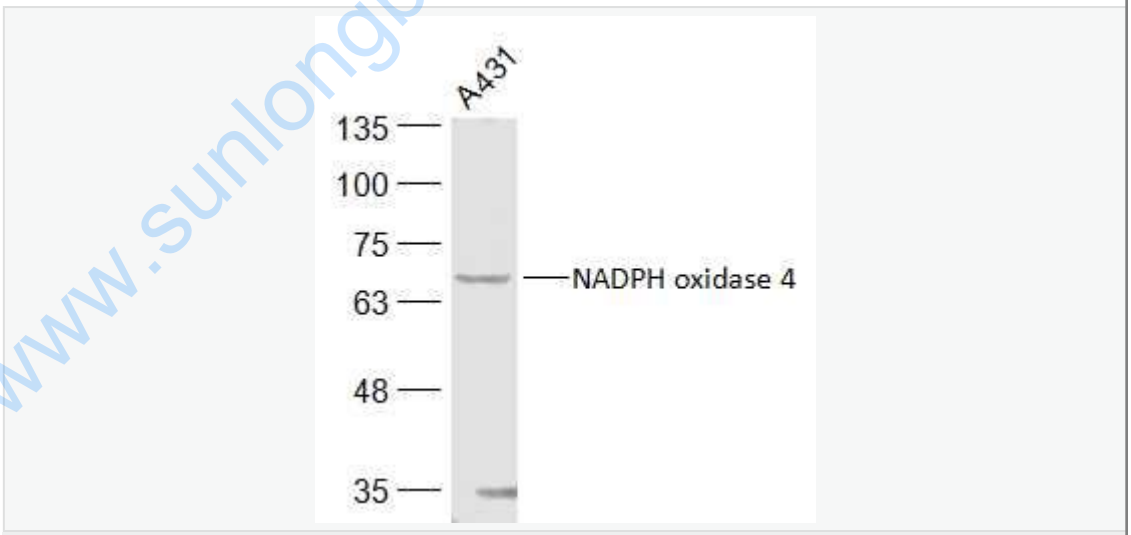
SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-NADPH oxidase 4 antibody

SL4730R

Product Name:	NADPH oxidase 4
Chinese Name:	NADPH氧化酶4抗体
Alias:	Kidney oxidase-1; Kidney superoxide-producing NADPH oxidase; KOX 1; KOX; Kox-1; NADPH; NADPH oxidase 4; Nox4; NOX4_HUMAN; Renal NAD(P)H-oxidase; RENOX.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	67kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NOX4:201-300/578<Extracellular>
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:	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. **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. May produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation. Isoform 3 is not functional. Isoform 4 displays an increased activity. Isoform 5 and isoform 6 display reduced activity. **Subunit:** Interacts with protein disulfide isomerase (By similarity). Interacts with, relocalizes and stabilizes CYBA/p22phox. Interacts with TLR4. **Subcellular Location:** Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein (Probable). Cell junction, focal adhesion (Probable). Nucleus (Probable). Note=May localize to plasma membrane and focal adhesions. According to PubMed:15927447, may also localize to the nucleus. **Tissue Specificity:** Mainly expressed in heart and skeletal muscle. Also strongly expressed in fetal brain and spinal cord. **Post-translational modifications:** 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. Contains 1 ferric oxidoreductase domain. **SWISS:** Q9NPH5 **Gene ID:** 50507 **Database links:** Entrez Gene: 50507 Human Entrez Gene: 50490 Mouse

	Entrez Gene: 85431 Rat Omim: 605261 Human SwissProt: Q9NPH5 Human SwissProt: Q9JHI8 Mouse SwissProt: Q924V1 Rat Unigene: 371036 Human **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: A431(Human) Cell Lysate at 30 ug Primary: Anti-NADPH oxidase 4 (SL4730R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

	Predicted band size: 67 kD Observed band size: 67 kD