

NADPH oxidase 4 Recombinant Protein | Nox4 recombinant protein

Recombinant Rat NADPH oxidase 4

CATALOG # AAA114256	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
-------------------------------	---

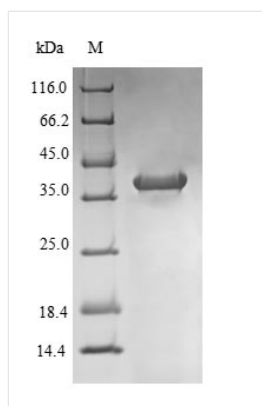
PRODUCT SYNONYMS

NADPH oxidase 4; Recombinant Rat NADPH oxidase 4; Kidney oxidase-1; KOX-1; Kidney superoxide-producing NADPH oxidase; Nox4 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	210-424aa; partial
Sequence	GGLLKYQTNL DTHPPGCISL NRTPSQNMSI ADYVSEHFHG SLPGGFSKLE DHYQKTLVKI CLEEPKFQAH FPQTWIWISG PLCLYCAERL YRCIRSNKPV TIISVINHPS DVMELRMIKE NFKARPGQYI ILHCPSVSAL ENHPFTLTMC PTETKATFGV HFKVVGDWTE RFRDLLLPSS SQDSEILPFI QSRNYPKLYI DGPFPGSPFEE SLNVE
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for Nox4 recombinant protein	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.
Product Categories/Family for Nox4 recombinant protein	Cardiovascular

References	Novel gp91(phox) homologues in vascular smooth muscle cells nox1 mediates angiotensin II-induced superoxide formation and redox-sensitive signaling pathways.Lassegue B., Sorescu D., Szoecs K., Yin Q., Akers M., Zhang Y., Grant S.L., Lambeth J.D., Griendling K.K.Circ. Res. 88:888-894(2001) A novel superoxide-producing NAD(P) H oxidase in kidney.Shiose A., Kuroda J., Tsuruya K., Hirai M., Hirakata H., Naito S., Hattori M., Sakaki Y., Sumimoto H.J. Biol. Chem. 276:1417-1423(2001) Distinct subcellular localizations of Nox1 and Nox4 in vascular smooth muscle cells.Hilenski L.L., Clempus R.E., Quinn M.T., Lambeth J.D., Griendling K.K.Arterioscler. Thromb. Vasc. Biol. 24:677-683(2004) Direct interaction of the novel Nox proteins with p22phox is required for the formation of a functionally active NADPH oxidase.Ambasta R.K., Kumar P., Griendling K.K., Schmidt H.H.H.W., Busse R., Brandes R.P.J. Biol. Chem. 279:45935-45941(2004) Nox4 NAD(P) H oxidase mediates hypertrophy and fibronectin expression in the diabetic kidney.Gorin Y., Block K., Hernandez J., Bhandari B., Wagner B., Barnes J.L., Abboud H.E.J. Biol. Chem. 280:39616-39626(2005) Regulation of NAD(P) H oxidase by associated protein disulfide isomerase in vascular smooth muscle cells.Janiszewski M., Lopes L.R., Carmo A.O., Pedro M.A., Brandes R.P., Santos C.X.C., Laurindo F.R.M.J. Biol. Chem. 280:40813-40819(2005)
------------	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	16758288
NCBI GeneID	85431
NCBI Accession #	NP_445976.1
NCBI GenBank Nucleotide #	NM_053524.1
UniProt Accession #	Q924V1; Q99M78
Molecular Weight	38.6 kDa
NCBI Official Full Name	NADPH oxidase 4
NCBI Official Synonym Full Names	NADPH oxidase 4
NCBI Official Symbol	Nox4
NCBI Protein Information	NADPH oxidase 4
UniProt Protein Name	NADPH oxidase 4
UniProt Gene Name	Nox4
UniProt Synonym Gene Names	Kox; KOX-1
UniProt Entry Name	NOX4_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.