



NOX4 Monoclonal Antibody

Catalog No	YP-mAb-07819
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	NOX4 RENOX
Protein Name	NADPH oxidase 4 (EC 1.6.3.-) (Kidney oxidase-1) (KOX-1) (Kidney superoxide-producing NADPH oxidase) (Renal NAD(P)H-oxidase)
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	NOX4 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	63kD
Cell Pathway	Endoplasmic reticulum membrane ; Multi-pass membrane protein. Cell membrane ; Multi-pass membrane protein . Cell junction, focal adhesion . May localize to plasma membrane and focal adhesions. According to PubMed:15927447, may also localize to the nucleus.; [Isoform 4]: Nucleus . Nucleus, nucleolus .
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.,induc

Background

This gene encodes a member of the NOX-family of enzymes that functions as the catalytic subunit the NADPH oxidase complex. The encoded protein is localized to non-phagocytic cells where it acts as an oxygen sensor and catalyzes the reduction of molecular oxygen to various reactive oxygen species (ROS). The ROS generated by this protein have been implicated in numerous biological functions including signal transduction, cell differentiation and tumor cell growth. A pseudogene has been identified on the other arm of chromosome 11. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Jan 2009],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images