

Immunotag™ NOX4 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITN2975
Product Description	Immunotag™ NOX4 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	NOX4
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	NOX4 Polyclonal Antibody detects endogenous levels of protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Gene Name	NOX4 RENOX
Accession No.	Q9NPH5 Q9JHI8 Q924V1

Antibody Specification

Description	NADPH oxidase 4(NOX4) Homo sapiens 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],
Protein Expression	Fetal kidney,Kidney,Lung,Ovary,Pulmonary artery,Synovial membrane tissue,
Subcellular Localization	stress fiber,nucleolus,mitochondrion,endoplasmic reticulum membrane,focal adhesion,integral component of membrane,apical plasma membrane,NADPH oxidase complex,perinuclear region of cytoplasm,
Protein 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.,induction:By 7-ketocholesterol (at protein level),PTM: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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.