

Product datasheet

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ARG55350 anti-NOX4 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes NOX4

Tested Reactivity Hu

Tested Application WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name NOX4

Species Human

Immunogen Recombinant protein of Human NOX4

Conjugation Un-conjugated

Alternate Names RENOX; KOX-1; P; Renal NAD; Kidney oxidase-1; NADPH oxidase 4; KOX; EC 1.6.3.-; Kidney superoxide-

producing NADPH oxidase

Application Instructions

Application table	Application	Dilution
	WB	1:200 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links GeneID: 50507 Human

Swiss-port # Q9NPH5 Human

Gene Symbol NOX4

Gene Full Name NADPH oxidase 4

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]

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 5 and isoform 6 display reduced

activity.

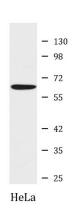
Isoform 4: Involved in redox signaling in vascular cells. Constitutively and NADPH-dependently generates reactive oxygen species (ROS). Modulates the nuclear activation of ERK1/2 and the ELK1 transcription factor, and is capable of inducing nuclear DNA damage. Displays an increased activity relative to isoform 1. [UniProt]

Research Area Cell Biology and Cellular Response antibody; Metabolism antibody; Signaling Transduction antibody

Calculated Mw 67 kDa

PTM Isoform 3 and isoform 4 are N-glycosylated. Isoform 4 glycosylation is required for its proper function.

Images



ARG55350 anti-NOX4 antibody WB image

Western blot: HeLa cell lysate stained with ARG55350 anti-NOX4 antibody.