| ARG55350 | Package: $100 \mu$ <br> anti-NOX4 antibody <br> Store at: $20^{\circ} \mathrm{C}$ |
| :--- | :--- |

## Summary

| Product Description | Rabbit Polyclonal antibody recognizes NOX4 |
| :--- | :--- |
| Tested Reactivity | Hu |
| Tested Application | Wab |
| Host | Polyclonal |
| Clonality | IgG |
| Isotype | NOX4 |
| Target Name | Recombinant protein of Human NOX4 |
| Species | Un-conjugated |
| Immunogen | RENOX; KOX-1; P; Renal NAD; Kidney oxidase-1; NADPH oxidase 4; KOX; EC 1.6.3.-; Kidney superoxide- |
| Conjugation | producing NADPH oxidase |
| Alternate Names |  |

Application Instructions

| Application table | Application | Dilution |
| :--- | :--- | :--- |
|  | WB |  |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations <br> 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 $2-8^{\circ} \mathrm{C}$ for up to a week. For long-term storage, aliquot <br> cyd store at $-20^{\circ} \mathrm{C}$. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw <br> cycles 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. |

Database links

|  | 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 lipolysaccharidemediated 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.

