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# Nox5 Polyclonal Antibody

Catalog # AP71359

## Product Information

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|---|---|
| **Application** | WB, IHC-P, IF, ICC, E |
| **Primary Accession** | Q96PH1 |
| **Reactivity** | Human, Rat, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 86439 |

## Additional Information

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|---|---|
| **Gene ID** | 79400 |
| **Other Names** | NOX5; NADPH oxidase 5 |
| **Dilution** | WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

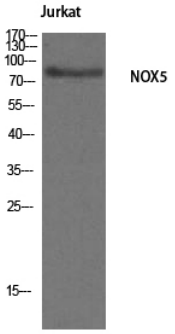
| | |
|---|---|
| **Name** | NOX5 ( HGNC:14874) |
| **Function** | Calcium-dependent NADPH oxidase that catalyzes the generation of superoxide from molecular oxygen utilizing NADPH as an electron donor (PubMed:12686516). Also synthesizes NAADP from its reduced NAADPH form which promotes Ca(2+) signaling during T cell activation (PubMed:34784249). May play a role in cell growth and apoptosis (PubMed:12686516). |
| **Cellular Location** | [Isoform v2]: Endoplasmic reticulum. Cell membrane; Multi-pass membrane protein. Note=Calcium-sensitive association and dissociation between the N- and C-terminal domains appears to facilitate its localization to the cell membrane |
| **Tissue Location** | Mainly expressed in pachytene spermatocytes of testis and in lymphocyte-rich areas of spleen and lymph nodes. Also detected in ovary, placenta, pancreas, cardiac fibroblasts. Expressed in B-cells and prostate malignant cells. [Isoform v2]: Expressed in microvascular endothelial cells (at protein level) (PubMed:17275676). Expressed in testis (PubMed:11483596). Expressed in endothelial cells and pulmonary artery smooth muscle cells |

(PubMed:17275676, PubMed:22427510) [Isoform v4]: Expressed in endothelial cells and pulmonary artery smooth muscle cells.

## Background

Calcium-dependent NADPH oxidase that generates superoxide. Also functions as a calcium-dependent proton channel and may regulate redox-dependent processes in lymphocytes and spermatozoa. May play a role in cell growth and apoptosis. Isoform v2 and isoform v5 are involved in endothelial generation of reactive oxygen species (ROS), proliferation and angiogenesis and contribute to endothelial response to thrombin.

## Images




Western Blot analysis of Jurkat cells using Nox5 Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.