



# Nox5 Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-02722                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Reactivity</b>                  | Human;Rat;Mouse;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Gene Name</b>                   | NOX5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human NOX5. AA range:677-726                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Specificity</b>                 | Nox5 Polyclonal Antibody detects endogenous levels of Nox5 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Dilution</b>                    | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>                    | EC:1.6.3.-;NADPH oxidase 5;NOX5A;NOX5B;Nox5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Observed Band</b>               | 86kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Calculated Molecular Weight</b> | 86kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Cell Pathway</b>                | Membrane ; Multi-pass membrane protein .; [Isoform v2]: Endoplasmic reticulum.; [Isoform v5]: Endoplasmic reticulum.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Tissue Specificity</b>          | Mainly expressed in pachytene spermatocytes of testis and in lymphocyte-rich areas of spleen and lymph nodes. Isoform v1 is expressed in spleen. Isoform v2 is expressed in testis. Also detected in ovary, placenta, pancreas, cardiac fibroblasts. Expressed in B-cells and prostate malignant cells. Isoform v1 and isoform v3 are expressed in epithelial colorectal adenocarcinoma cells. Isoform v2 and isoform v4 are expressed in endothelial cells. Isoform v1, isoform v2, isoform v3 and isoform v4 are expressed in pulmonary artery smooth muscle cells. Isoform v2 and isoform v5 are expressed in microvascular endothelial cells (at protein level). |
| <b>Function</b>                    | cofactor:FAD.,cofactor:Magnesium.,developmental stage:Expressed in fetal tissues.,enzyme regulation:Activated by calcium which induces conformational changes and interaction between the N-terminal regulatory region and the C-                                                                                                                                                                                                                                                                                                                                                                                                                                    |



terminal catalytic region. Inhibited by diphenylene iodonium.,function: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.,induction:Down-regulated by TGFB1.,miscellaneous:Isoforms 3 and 4 of this protein have four functional calcium-binding sites. Isoforms 1 and 2 have the third EF-hand domain interrupted by an insert.,similarity:Contains 1 FAD-binding FR-type domain.,similarity:Contains 1 ferric oxidoreductase domain.,similarity:Contains 4 EF-hand domains.,tissue specificity:Mainly expe

## Background

This gene is predominantly expressed in the testis and lymphocyte-rich areas of spleen and lymph nodes. It encodes a calcium-dependent NADPH oxidase that generates superoxide, and functions as a calcium-dependent proton channel that may regulate redox-dependent processes in lymphocytes and spermatozoa. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Oct 2011],

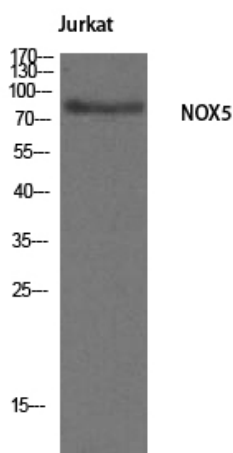
## matters needing attention

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



Western Blot analysis of Jurkat cells using Nox5 Polyclonal Antibody

Western blot analysis of lysates from Jurkat cells, using NOX5 Antibody. The lane on the right is blocked with the synthesized peptide.