

Rabbit NOX5 Polyclonal Antibody | anti-NOX5 antibody

Anti-NOX5 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125684	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

NOX5; Polyclonal Antibody; Anti-NOX5 Antibody; NADPH oxidase 5[EC 1. 6. 3. -; NADPH oxidase 5; anti-NOX5 antibody

PRODUCT SPECIFICATIONS

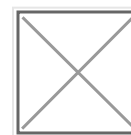
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for NOX5 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-NOX5 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human NOX5 recombinant protein (Position: A21-F765).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of PC-3 cells using anti-NOX5 antibody (AAA125684). Overlay histogram showing PC-3 cells stained with AAA125684 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NOX5 Antibody (AAA125684, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



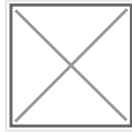
IHC (Immunohistochemistry)

Figure 4. IHC analysis of NOX5 using anti NOX5 antibody (AAA125684). NOX5 was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-NOX5 Antibody (AAA125684) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



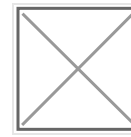
IHC (Immunohistochemisry)

Figure 3. IHC analysis of NOX5 using anti NOX5 antibody (AAA125684). NOX5 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-NOX5 Antibody (AAA125684) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of NOX5 using anti-NOX5 antibody (AAA125684). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HEK293 whole cell lysates Lane 2: human Jurkat whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-NOX5 antigen affinity purified polyclonal antibody (Catalog # AAA125684) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for NOX5 at approximately 86KD. The expected band size for NOX5 is at 86KD.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of NOX5 using anti NOX5 antibody (AAA125684). NOX5 was detected in paraffin-embedded section of human pancreatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-NOX5 Antibody (AAA125684) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-NOX5 antibody	NOX5(Nadph Oxidase 5), also known as NOX5A or NOX5B, is a protein which in humans is encoded by the NOX5 gene. The International Radiation Hybrid Mapping Consortium mapped the NOX5 gene to chromosome 15. NOX5 is a novel NADPH oxidase that generates superoxide and functions as an H ⁺ channel in a Ca ²⁺ -dependent manner. It is found that, when heterologously expressed, NOX5 was quiescent in unstimulated cells. However, in response to elevations of the cytosolic Ca ²⁺ concentration, it generated large amounts of superoxide. Using RT-PCR and Southern and Western blot analyses, NOX5 was identified as a flavin-containing Ca ²⁺ -dependent oxidase present in hairy leukemic cells (HC), but not normal B cells.
References	1. Banfi, B., Molnar, G., Maturana, A., Steger, K., Hegedus, B., Demaurex, N., Krause, K. -H. A Ca²⁺-activated NADPH oxidase in testis, spleen, and lymph nodes. J. Biol. Chem. 276: 37594-37601, 2001. 2. Kamiguti, A. S., Serrander, L., Lin, K., Harris, R. J., Cawley, J. C., Allsup, D. J., Slupsky, J. R., Krause, K. -H., Zuzel, M. Expression and activity of NOX5 in the circulating malignant B cells of hairy cell leukemia. J. Immun. 175: 8424-8430, 2005.

NCBI AND UNIPROT INFORMATION

NCBI GI #	296278227
NCBI GeneID	79400
NCBI Accession #	NP_001171708.1
NCBI GenBank Nucleotide #	NM_001184779.1
UniProt Accession #	Q96PH1 ; Q08AN2 ; Q08AN3 ; Q8TEQ1 ; Q8TER4 ; Q96PH2 ; Q96PJ8 ; Q96PJ9 ; Q9H6E0 ; Q9HAM8 ; B2RBJ4
Molecular Weight	86,439 Da
NCBI Official Full Name	NADPH oxidase 5 isoform 2
NCBI Official Synonym Full Names	NADPH oxidase, EF-hand calcium binding domain 5

NCBI Official Symbol	NOX5
NCBI Protein Information	NADPH oxidase 5
UniProt Protein Name	NADPH oxidase 5
UniProt Gene Name	NOX5
UniProt Entry Name	NOX5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/nox5-antibody-direct-elisa-flow-cytometry-immunohistochemistry-western-blot-elisa/125684>