

Rabbit anti-Human PREX1 Polyclonal Antibody | anti-PREX1 antibody

Anti-PREX1 Antibody Picoband

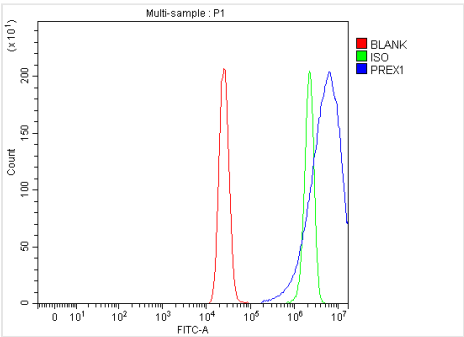
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127159	Rabbit	Human	Flow Cytometry, Functional Assay, Western Blot, ELISA

PRODUCT SYNONYMS

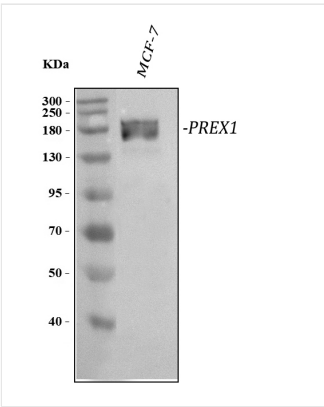
PREX1; Polyclonal Antibody; Anti-PREX1 Antibody Picoband; Transcription factor E2F3; NADPH oxidase 5 ; NADPH oxidase 5; NOX5; anti-PREX1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Mainly expressed in pachytene spermatocytes of testis and in lymphocyte-rich areas of spleen and lymph nodes. Isoform v1 isExpressed in spleen. Isoform v2 isExpressed in testis. Also detected in ovary, placenta, pancreas, cardiac fibroblasts.Expressed in B-cells and prostate malignant cells. Isoform v1 and isoform v3 areExpressed in epithelial colorectal adenocarcinoma cells. Isoform v2 and isoform v4 areExpressed in endothelial cells. Isoform v1, isoform v2, isoform v3 and isoform v4 areExpressed in pulmonary artery smooth muscle cells. Isoform v2 and isoform v5 areExpressed in microvascular endothelial cells (at protein level).
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-PREX1 antibody	FCM/FACS (Flow Cytometry), WB (Western Blot), ELISA
Immunogen	E coli-derived human PREX1 recombinant protein (Position: N643-D1155).
Subcellular Localization	Membrane, Multi-pass membrane protein
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein 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. 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.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of MCF-7 cells using anti-PREX1 antibody (AAA127159). Overlay histogram showing MCF-7 cells stained with AAA127159 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PREX1 Antibody (AAA127159, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of PREX1 using anti-PREX1 antibody (AAA127159). 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 30 ug of sample under reducing conditions. Lane 1: human MCF-7 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-PREX1 antigen affinity purified polyclonal antibody (#AAA127159) at 0.5ug/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 1:5000 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 PREX1 at approximately 186 kDa. The expected band size for PREX1 is at 186 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PREX1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-PREX1 antibody	Primary Antibodies; Apoptosis; Associated Proteins; Cell Biology; Cell Cycle; Cell Differentiation; Channels; Intracellular; Metabolism; Oxidative Stress; Pathways and Processes; Plasma Membrane; Redox Metabolism; Signal Transduction
References	1. Donald, S., Humby, T., Fyfe, I., Segonds-Pichon, A., Walker, S. A., Andrews, S. R., Coadwell, W. J., Emson, P., Wilkinson, L. S., Welch, H. C. E. P-Rex2 regulates Purkinje cell dendrite morphology and motor coordination. Proc. Nat. Acad. Sci. 105: 4483-4488, 2008. 2. Welch, H. C. E., Coadwell, W. J., Ellson, C. D., Ferguson, G. J., Andrews, S. R., Erdjument-Bromage, H., Tempst, P., Hawkins, P. T., Stephens, L. R. P-Rex1, a PtdIns(3,4,5)P3- and G-beta-gamma-regulated guanine-nucleotide exchange factor for Rac. Cell 108: 809-821, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GI #	34452732
NCBI GeneID	57580
NCBI Accession #	NP_065871.2
NCBI GenBank Nucleotide #	NM_020820.3
UniProt Accession #	Q8TCU6; Q5JS95; Q5JS96; Q69YL2; Q7Z2L9; Q9BQH0; Q9BX55; Q9H4Q6; Q9P2D2; Q9UGQ4; E1P5X9
Molecular Weight	175,847 Da
NCBI Official Full Name	phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 1 protein
NCBI Official Synonym Full Names	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1
NCBI Official Symbol	PREX1
NCBI Official Synonym Symbols	P-REX1

NCBI Protein Information	phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 1 protein; ptdIns(3,4,5)-dependent Rac exchanger 1
UniProt Protein Name	Phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 1 protein
UniProt Gene Name	PREX1
UniProt Synonym Gene Names	KIAA1415; P-Rex1; PtdIns(3,4,5)-dependent Rac exchanger 1
UniProt Entry Name	PREX1_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/prex1-antibody-flow-cytometry-western-blot-elisa/127159>