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# PINX-1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59299

## Product Information

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| **Application** | WB, IHC-P, IHC-F, IF, ICC, E |
| **Primary Accession** | Q96BK5 |
| **Reactivity** | Rat, Pig, Bovine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 37035 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human PINX-1 |
| **Epitope Specificity** | 65-160/328 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBCELLULAR LOCATION** | Nucleus. |
| **SIMILARITY** | Belongs to the PINX1 family. Contains 1 G-patch domain. |
| **SUBUNIT** | Interacts with MCRS1, TERT, TERF1, NCL/nucleolin, and the telomerase RNA. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | PINX1 is a ubiquitously expressed protein that localizes to nucleoli and telomere speckles. PINX1 contains one G-patch domain and one telomeric inhibiting domain (TID) at its C-terminus. PINX1 interacts with the telomere protein TRF1 and the telomerase reverse transcriptase TERT. The TID domain of PINX1 specifically interacts with TERT and functions to inhibit its activity, thus participating in the regulation of telomerase activity. Overexpression of PINX1 leads to shortened telomeres, further supporting an inhibitory role of PINX1 on telomerase activity. The depletion of PINX1 significantly increases telomerase activity and may lead to tumorigenicity of cancer cells. This suggests that PINX1 acts as a tumor suppressor and can inhibit cell proliferation. In addition, PINX1 is involved in nucleolar RNA maturation. |

## Additional Information

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| **Gene ID** | 54984 |
| **Other Names** | PIN2/TERF1-interacting telomerase inhibitor 1, Liver-related putative tumor suppressor, Pin2-interacting protein X1, Protein 67-11-3, TRF1-interacting protein 1, PINX1, LPTL, LPTS |
| **Target/Specificity** | Ubiquitous; expressed at low levels. |
| **Dilution** | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,Flow-Cyt=2ug/Test,ELISA=1:5000-10000 |

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| **Format** | 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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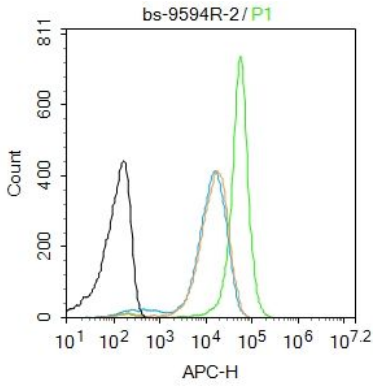
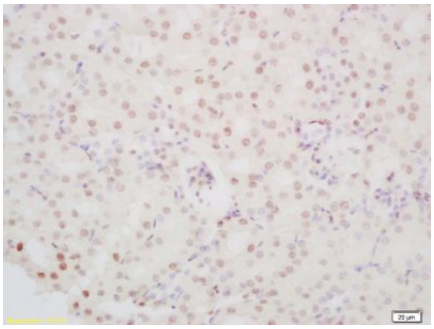
| **Name** | PINX1 |
| **Synonyms** | LPTL, LPTS |
| **Function** | Microtubule-binding protein essential for faithful chromosome segregation. Mediates TRF1 and TERT accumulation in nucleolus and enhances TRF1 binding to telomeres. Inhibits telomerase activity. May inhibit cell proliferation and act as tumor suppressor. |
| **Cellular Location** | Nucleus. Nucleus, nucleolus. Chromosome, telomere. Chromosome, centromere, kinetochore Note=Localizes in nucleoli, at telomere speckles and to the outer plate of kinetochores. Localization to the kinetochore is mediated by its central region and depends on NDC80 and CENPE |
| **Tissue Location** | Ubiquitous; expressed at low levels. Not detectable in a number of hepatocarcinoma cell lines |

## Images




Blank control: Mouse spleen.
Primary Antibody (green line): Rabbit Anti-PINX-1 antibody (AP59299)
Dilution: 2 µg /10^6 cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody : Goat anti-rabbit IgG-AF647
Dilution: 1 µg /test.
Protocol
The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20℃. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed



Tissue/cell: mouse kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-PINX-1 Polyclonal Antibody, Unconjugated(AP59299) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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