

Rabbit PDP1/PDP Polyclonal Antibody | anti-PDP1 antibody

Anti-PDP1/PDP Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126432	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

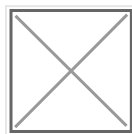
PRODUCT SYNONYMS

PDP1/PDP; Polyclonal Antibody; Anti-PDP1/PDP Antibody Picoband; anti-PDP1 antibody

PRODUCT SPECIFICATIONS

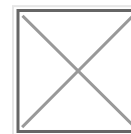
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-PDP1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human PDP1/PDP recombinant protein (Position: S37-E537).
Preparation and Storage	Store 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.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of U937 cells using anti-PDP1/PDP antibody (AAA126432). Overlay histogram showing U937 cells stained with AAA126432 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PDP1/PDP Antibody (AAA126432, 1 ug/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 (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of PDP1/PDP using anti-PDP1/PDP antibody (AAA126432). PDP1/PDP was detected in an immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-PDP1/PDP Antibody (AAA126432) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of PDP1/PDP using anti-PDP1/PDP antibody (AAA126432). 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 PC-3 whole cell lysates, Lane 2: human U-87MG whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: rat brain tissue lysates, Lane 5: mouse brain tissue 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-PDP1/PDP antigen affinity purified polyclonal antibody (#AAA126432) at 0.5 ug/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 PDP1/PDP at approximately 53-61 kDa. The expected band size for PDP1/PDP is at 61 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PDP1 antibody	Pyruvate dehydrogenase (E1) is one of the three components (E1, E2, and E3) of the large pyruvate dehydrogenase complex. Pyruvate dehydrogenase kinases catalyze phosphorylation of serine residues of E1 to inactivate the E1 component and inhibit the complex. Pyruvate dehydrogenase phosphatases catalyze the dephosphorylation and activation of the E1 component to reverse the effects of pyruvate dehydrogenase kinases. Pyruvate dehydrogenase phosphatase is a heterodimer consisting of catalytic and regulatory subunits. Two catalytic subunits have been reported; one is predominantly expressed in skeletal muscle and another one is much more abundant in the liver. The catalytic subunit, encoded by this gene, is the former, and belongs to the protein phosphatase 2C (PP2C) superfamily. Along with the pyruvate dehydrogenase complex and pyruvate dehydrogenase kinases, this enzyme is located in the mitochondrial matrix. Mutation in this gene causes pyruvate dehydrogenase phosphatase deficiency. Multiple alternatively spliced transcript variants encoding different isoforms have been identified.
Product Categories/Family for anti-PDP1 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	239985422
NCBI GeneID	54704
NCBI Accession #	NP_001155251.1
NCBI GenBank Nucleotide #	NM_001161779.1
UniProt Accession #	Q9P0J1; Q5U5K1; B3KX71; J3KPU0
Molecular Weight	63,695 Da
NCBI Official Full Name	pyruvate dehydrogenase phosphatase catalytic subunit 1 isoform 2
NCBI Official Synonym Full Names	pyruvate dehydrogenase phosphatase catalytic subunit 1
NCBI Official Symbol	PDP1
NCBI Official Synonym Symbols	PDH; PDP; PDPC; PPM2A; PPM2C
NCBI Protein Information	pyruvate dehydrogenase phosphatase catalytic subunit 1
UniProt Protein Name	[Pyruvate dehydrogenase [acetyl-transferring]]-phosphatase 1, mitochondrial
UniProt Gene Name	PDP1
UniProt Synonym Gene Names	PDP; PPM2C; PDP 1; PDPC 1

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/pdp1-pdp-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/126432>