

Rabbit Pyruvate Carboxylase/PC Polyclonal Antibody | anti-PC antibody

Anti-Pyruvate Carboxylase/PC Antibody Picoband

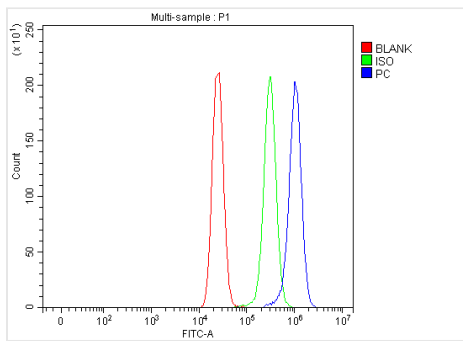
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19801	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

Pyruvate Carboxylase/PC; Polyclonal Antibody; Anti-Pyruvate Carboxylase/PC Antibody Picoband; Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody; KS6B1_HUMAN antibody; p70 alpha antibody; P70 beta 1 antibody; p70 ribosomal S6 kinase alpha antibody; p70 ribosomal S6 kinase beta 1 antibody; p70 S6 kinase alpha antibody; P70 S6 Kinase antibody; p70 S6 kinase alpha 1 antibody; p70 S6 kinase alpha 2 antibody; p70 S6K antibody; p70 S6K-alpha antibody; p70 S6KA antibody; p70(S6K) alpha antibody; p70(S6K)-alpha antibody; p70-alpha antibody; p70-S6K 1 antibody; p70-S6K antibody; P70S6K antibody; P70S6K1 antibody; p70S6Kb antibody; PS6K antibody; Ribosomal protein S6 kinase 70kDa polypeptide 1 antibody; Ribosomal protein S6 kinase beta 1 antibody; Ribosomal protein S6 kinase beta-1 antibody; Ribosomal protein S6 kinase I antibody; RPS6KB1 antibody; S6K antibody; S6K-beta-1 antibody; S6K1 antibody; Serine/threonine kinase 14 alpha antibody; Serine/threonine-protein kinase 14A antibody; STK14A antibody; anti-PC antibody

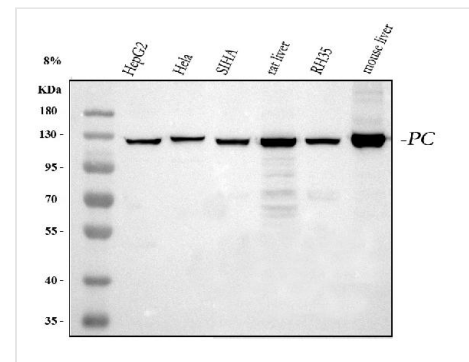
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Expressed in all tissues.
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-PC antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA
Application Notes	WB: 0.1-0.25ug/ml, Human, Mouse, Rat IHC: 2-5ug/ml, Human, Mouse, Rat ICC/IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10 ⁶ cells, Human ELISA: 0.1-0.5ug/ml
Immunogen	E coli-derived human Pyruvate Carboxylase/PC recombinant protein (Position: R88-D1165). Human PC shares 97% and 96.6% amino acid (aa) sequence identity with mouse and rat PC, respectively.
Subcellular Localization	Cytoplasm, Nucleus
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	Downstream effector of TOR signaling pathway involved in osmotic stress response. Could be involved in the control of plant growth and development. Phosphorylates the ribosomal proteins P14, P16 and S6. Functions as a repressor of cell proliferation and required for maintenance of chromosome stability and ploidy levels through the RBR1-E2F pathway.
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 (Flow Cytometry)

Figure 8. Flow Cytometry analysis of MCF-7 cells using anti-Pyruvate Carboxylase/PC antibody (AAA19801). Overlay histogram showing MCF-7 cells stained with AAA19801 (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-Pyruvate Carboxylase/PC Antibody (AAA19801, 1 μ g/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 μ g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 7. IF analysis of Pyruvate Carboxylase/PC using anti-Pyruvate Carboxylase/PC antibody (AAA19801). Pyruvate Carboxylase/PC was detected in an immunocytochemical section of HELA cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Pyruvate Carboxylase/PC Antibody (AAA19801) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Pyruvate Carboxylase/PC Antibody (AAA19801) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Pyruvate Carboxylase/PC Antibody (AAA19801) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Pyruvate Carboxylase/PC Antibody (AAA19801) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Pyruvate Carboxylase/PC Antibody (AAA19801) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Pyruvate Carboxylase/PC Antibody (AAA19801) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution).

(Lane 2: human Hela whole cell lysates,Lane 3: human SiHa whole cell lysates,Lane 4: rat liver tissue lysates,Lane 5: rat RH35 whole cell lysates,Lane 6: mouse liver 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-Pyruvate Carboxylase/PC antigen affinity purified polyclonal antibody (#AAA19801) at 0.25ug/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 Pyruvate Carboxylase/PC at approximately 125 kDa. The expected band size for Pyruvate Carboxylase/PC is at 130 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PC 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-PC antibody	Primary Antibodies ; Signal Transduction ; Signaling Pathway ; Small G Proteins
References	1. Barden, R. E., Taylor, B. L., Isohashi, F., Frey, W. H., II, Zander, G., Lee, J. C., Utter, M. F. Structural properties of pyruvate carboxylases from chicken liver and other sources. Proc. Nat. Acad. Sci. 72: 4308-4312, 1975.2. Brun, N., Robitaille, Y., Grignon, A., Robinson, B. H., Mitchell, G. A., Lambert, M. Pyruvate carboxylase deficiency: prenatal onset of ischemia-like brain lesions in two sibs with the acute neonatal form. Am. J. Med. Genet. 84: 94-101, 1999. 3. Carbone, M. A., Applegarth, D. A., Robinson, B. H. Intron retention and frameshift mutations result in severe pyruvate carboxylase deficiency in two male siblings. Hum. Mutat. 20: 48-56, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GI #	106049295
NCBI GeneID	5091
NCBI Accession #	NP_000911.2
NCBI GenBank Nucleotide #	NM_000920.3
UniProt Accession #	P11498; Q16705
Molecular Weight	129,634 Da
NCBI Official Full Name	pyruvate carboxylase, mitochondrial
NCBI Official Synonym Full Names	pyruvate carboxylase
NCBI Official Symbol	PC
NCBI Official Synonym Symbols	PCB
NCBI Protein Information	pyruvate carboxylase, mitochondrial; pyruvic carboxylase
UniProt Protein Name	Pyruvate carboxylase, mitochondrial
UniProt Gene Name	PC
UniProt Synonym Gene Names	PCB
UniProt Entry Name	PYC_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/pyruvate-carboxylase-pc-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/19801>