Rabbit PDK3 Polyclonal Antibody | anti-PDK3 antibody

Anti-PDK3 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19849	**Rabbit**	**Human, Mouse, Rat**	**Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA**

PRODUCT SYNONYMS

PDK3; Polyclonal Antibody; Anti-PDK3 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-PDK3 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-PDK3 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA
Application Notes	WB: 0.25-0.5ug/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 PDK3 recombinant protein (Position: Y84-Q406). Human PDK3 shares 97.2% amino acid (aa) sequence identity with mouse PDK3.
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.

IMAGES

FCM (Flow Cytometry)

Figure 7. Flow Cytometry analysis of U251 cells using anti-PDK3 antibody (AAA19849).Overlay histogram showing U251 cells stained with AAA19849 (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-PDK3 Antibody (AAA19849, 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.

IF (Immunofluorescence)

Figure 6. IF analysis of PDK3 using anti-PDK3 antibody (AAA19849).PDK3 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-PDK3 Antibody (AAA19849) 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-PDK3 Antibody (AAA19849) 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-PDK3 Antibody (AAA19849) 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-PDK3 Antibody (AAA19849) 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 (Lane 2: human 293T whole cell lysates,Lane 3: human RT4 whole cell lysates,Lane 4: human SiHa whole cell lysates,Lane 5: human Jurkat whole cell lysates,Lane 6: human U251 whole cell lysates,Lane 7: human A549 whole cell lysates,Lane 8: rat testis tissue lysates,Lane 9: mouse testis 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-PDK3 antigen affinity purified polyclonal antibody (#AAA19849) 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 PDK3 at approximately 47 kDa. The expected band size for PDK3 is at 47 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PDK3 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-PDK3 antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins
References	1. Baker, J. C., Yan, X., Peng, T., Kasten, S., Roche, T. E. Marked differences between two isoforms of human pyruvate dehydrogenase kinase. J. Biol. Chem. 275: 15773-15781, 2000. 2. Degenhardt, T., Saramaki, A., Malinen, M., Rieck, M., Vaisanen, S., Huotari, A., Herzig, K.-H., Muller, R., Carlberg, C. Three members of the human pyruvate dehydrogenase kinase gene family are targets of the peroxisome proliferator-activated receptor beta/delta. J. Molec. Biol. 372: 341-355, 2007. 3. Gudi, R., Bowker-Kinley, M. M., Kedishvili, N. Y., Zhao, Y., Popov, K. M. Diversity of the pyruvate dehydrogenase kinase gene family in humans. J. Biol. Chem. 270: 28989-28994, 1995. Note: Erratum: J. Biol. Chem. 271: 1250 only, 1996.

NCBI AND UNIPROT INFORMATION

NCBI GI #	215422338
NCBI GeneID	5165
NCBI Accession #	NP_001135858.1
NCBI GenBank Nucleotide #	NM_001142386.2
UniProt Accession #	Q15120; B4DXG6

Molecular Weight	46,939 Da
NCBI Official Full Name	pyruvate dehydrogenase kinase, isozyme 3 isoform 1
NCBI Official Synonym Full Names	pyruvate dehydrogenase kinase, isozyme 3
NCBI Official Symbol	PDK3
NCBI Official Synonym Symbols	CMTX6; GS1-358P8.4
NCBI Protein Information	pyruvate dehydrogenase kinase, isozyme 3; pyruvate dehydrogenase kinase, isoenzyme 3; pyruvate dehydrogenase, lipoamide, kinase isozyme 3, mitochondrial; [Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 3, mitochondrial
UniProt Protein Name	[Pyruvate dehydrogenase (acetyl-transferring)] kinase isozyme 3, mitochondrial
UniProt Gene Name	**PDK3**
UniProt Synonym Gene Names	PDHK3
UniProt Entry Name	PDK3_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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