Datasheet for ABIN7602555

anti-PDK3 antibody (AA 84-406)

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Overview

Quantity:	100 µg
Target:	PDK3
Binding Specificity:	AA 84-406
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PDK3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Purpose:	Anti-PDK3 Antibody Picoband®
Immunogen:	E.coli-derived human PDK3 recombinant protein (Position: Y84-Q406). Human PDK3 shares 97.2% amino acid (aa) sequence identity with mouse PDK3.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Anti-PDK3 Antibody Picoband® (ABIN7602555). Tested in ELISA, IF, IHC, ICC, WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. 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 Details

Purification:	Immunogen affinity purified.

Target Details

Target:	PDK3
Alternative Name:	PDK3 (PDK3 Products)
Background:	Synonyms: 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 70 kDa 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 Tissue Specificity: Expressed in all tissues. Background: Pyruvate dehydrogenase lipoamide kinase isozyme 3, mitochondrial is an enzyme that in humans is encoded by the PDK3 gene. The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2). It provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle, and thus is one of the major enzymes responsible for the regulation of glucose metabolism. The enzymatic activity of PDH is regulated by a phosphorylation/dephosphorylation cycle, and phosphorylation results in inactivation of PDH. The protein encoded by this gene is one of the three pyruvate dehydrogenase kinases that inhibits the PDH complex by phosphorylation of the E1 alpha subunit. This gene is predominantly expressed in the heart and skeletal muscles. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Molecular Weight:	47 kDa
Gene ID:	5165
UniProt:	Q15120
Pathways:	PI3K-Akt Signaling, Carbohydrate Homeostasis, Regulation of Carbohydrate Metabolic Process, Warburg Effect

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Mouse, Rat Immunohistochemistry, 2-5 µg/mL, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human ELISA, 0.1-0.5 µg/mL, - 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.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.