

[KD Validated] Anti-PDK1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

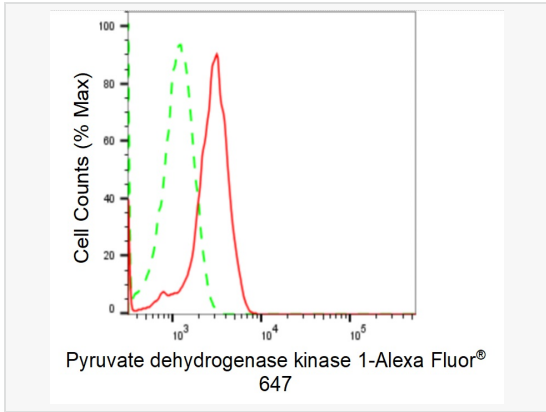
Catalog # R021015

Product Information

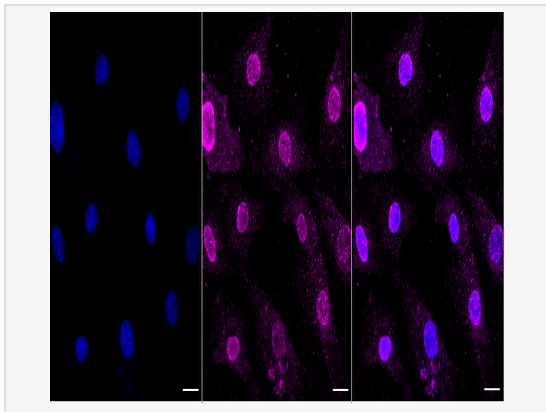
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	47L88F57
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human PDK1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-PDK1 Rabbit mAb [47L88F57] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

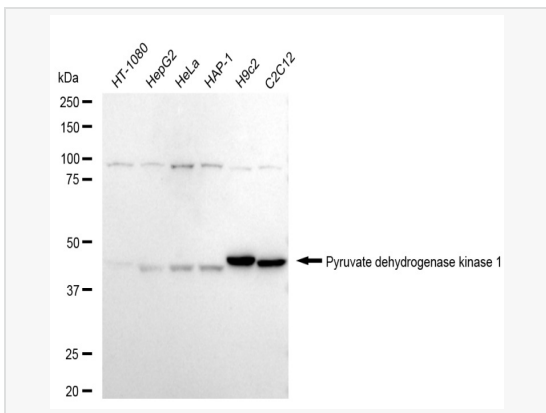
Synonyms	Pyruvate Dehydrogenase Kinase 1; [Pyruvate Dehydrogenase (Acetyl-Transferring)] Kinase Isozyme 1, Mitochondrial; Pyruvate Dehydrogenase Kinase, Isoenzyme 1; PDH Kinase 1; EC 2.7.11.2; Pyruvate Dehydrogenase (Acetyl-Transferring) Kinase Isozyme 1, Mitochondrial; Mitochondrial Pyruvate Dehydrogenase, Lipoamide, Kinase Isoenzyme 1; Pyruvate Dehydrogenase Kinase, Isozyme 1; Pyruvate Dehydrogenase Kinase Isoform 1; EC 2.7.11; PDHK1.
Calculated MW	Calculated MW: 49 kDa, Observed MW: 49 kDa
Uniprot ID	Q15118
Gene ID	5163
Background	Pyruvate dehydrogenase (PDH) is a mitochondrial multienzyme complex that catalyzes the oxidative decarboxylation of pyruvate and is one of the major enzymes responsible for the regulation of homeostasis of carbohydrate fuels in mammals. The enzymatic activity is regulated by a phosphorylation/dephosphorylation cycle. Phosphorylation of PDH by a specific pyruvate dehydrogenase kinase (PDK) results in inactivation. Multiple alternatively spliced transcript variants have been found for this gene.



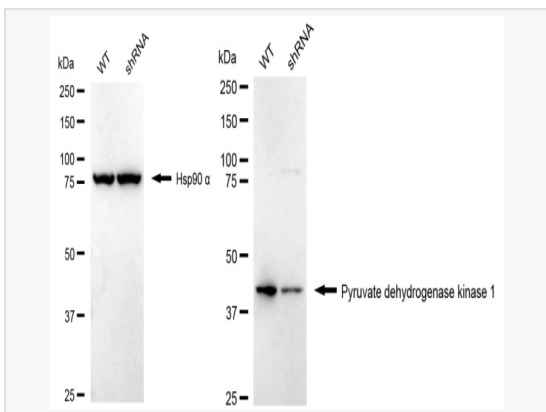
Flow cytometric analysis of Pyruvate dehydrogenase kinase 1 expression in H9c2 cells using Pyruvate dehydrogenase kinase 1 antibody (R021015, 1:2,000). Green, isotype control; red, Pyruvate dehydrogenase kinase 1.



Immunocytochemical staining of H9C2 cells with Pyruvate dehydrogenase kinase 1 antibody (R021015, 1:1,000). Nuclei were stained blue with DAPI; Pyruvate dehydrogenase kinase 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μm .



Western blotting analysis using Pyruvate dehydrogenase kinase 1 antibody (R021015). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Pyruvate dehydrogenase kinase 1 antibody (R021015, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using Pyruvate dehydrogenase kinase 1 antibody (R021015). Pyruvate dehydrogenase kinase 1 expression in wild type (WT) and Pyruvate dehydrogenase kinase 1 shRNA knockdown (KD) HT-1080 cells with 20 μg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Pyruvate dehydrogenase kinase 1 antibody (R021015, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.