

Rabbit Anti-PDK1/Mitochondrial Pyruvate dehydrogenase kinase 1 antibody

SL3788R

Product Name:	PDK1/Mitochondrial Pyruvate dehydrogenase kinase 1
Chinese Name:	丙酮酸脱氢酶激酶1抗体
Alias:	PDHK1; mitochondrial; [Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1; HGNC:8809; Mitochondrial pyruvate dehydrogenase kinase isoenzyme 1; PDK 1; Pyruvate dehydrogenase kinase isoform 1; Pyruvate dehydrogenase kinase, isoenzyme 1; PDK1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	cytoplasmic Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PDK1:51-150/436
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. [provided by RefSeq, Jun 2013]

Function:

Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.

Subcellular Location:

Mitochondrion matrix.

Tissue Specificity:

Expressed predominantly in the heart.

Similarity:

Belongs to the PDK/BCKDK protein kinase family. Contains 1 histidine kinase domain.

SWISS:

O15118

Gene ID:

5163

Database links:

Entrez Gene: 5163Human

Entrez Gene: 228026Mouse

Entrez Gene: 116551Rat

Omim: 602524Human

SwissProt: Q15118Human

SwissProt: Q8BFP9Mouse

SwissProt: Q63065Rat

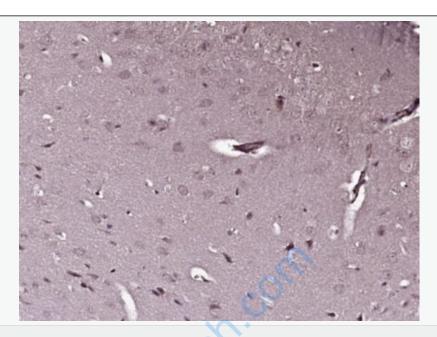
Unigene: 470633Human

<u>Unigene: 34411</u>Mouse

Unigene: 11185Rat

Important Note:

	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	Sample: Heart (Mouse) Lysate at 40 ug Primary: Anti- PDK 1/Mitochondrial Pyruvate dehydrogenase kinase 1(SL3788R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 45 kD Observed band size: 50 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PDK1/Mitochondrial Pyruvate dehydrogenase kinase 1) Polyclonal Antibody, Unconjugated (SL3788R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.