

# Anti-Pyruvate Dehydrogenase E2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

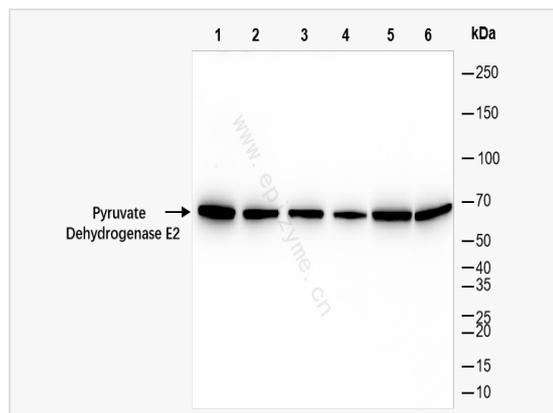
Catalog # R010220

## Product Information

Application	ELISA, IHC-P/IF (Tissue-P), IF (Cell)/ICC, WB
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	87K50L88
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Pyruvate Dehydrogenase E2
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Pyruvate Dehydrogenase E2 Rabbit mAb [87K50L88] is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Synonyms	70 kDa mitochondrial autoantigen of primary biliary cirrhosis, Dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex, Dihydrolipoamide S Acetyltransferase, Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex mitochondrial, DLAT, DLTA, E2, E2 component of pyruvate dehydrogenase complex, M2 antigen complex 70 kDa subunit, mitochondrial, ODP2_HUMAN, PBC, PDC E2, PDC-E2, PDCE2, Pyruvate dehydrogenase complex component E2, Pyruvate dehydrogenase complex E2 subunit.
Calculated MW	Calculated MW: 69 kDa; Observed MW: 69 kDa
Uniprot ID	P10515
Gene ID	1737
Background	This gene encodes component E2 of the multi-enzyme pyruvate dehydrogenase complex (PDC). PDC resides in the inner mitochondrial membrane and catalyzes the conversion of pyruvate to acetyl coenzyme A. The protein product of this gene, dihydrolipoamide acetyltransferase, accepts acetyl groups formed by the oxidative decarboxylation of pyruvate and transfers them to coenzyme A. Dihydrolipoamide acetyltransferase is the antigen for antimitochondrial antibodies. These autoantibodies are present in nearly 95% of patients with the autoimmune liver disease primary biliary cirrhosis (PBC). In PBC, activated T lymphocytes attack and destroy epithelial cells in the bile duct where this protein is abnormally distributed and overexpressed. PBC eventually leads to cirrhosis and liver failure. Mutations in this gene are also a cause of pyruvate dehydrogenase E2 deficiency which causes primary lactic acidosis in infancy and early childhood.[provided by RefSeq, Oct 2009]



Western Blot - Anti-Pyruvate Dehydrogenase E2 Rabbit mAb [87K50L88]

All lanes: R010220 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 5: Rat heart whole tissue lysates

Lane 6: Mouse muscle whole tissue lysates

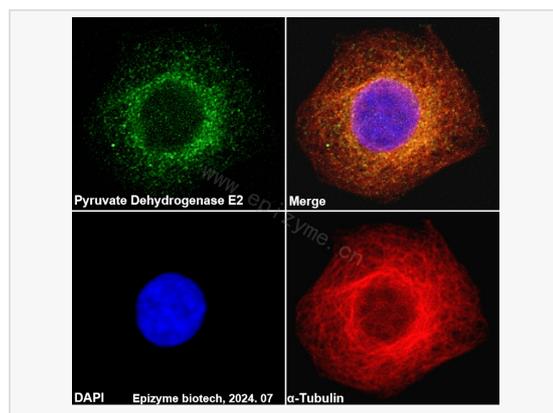
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 69 kDa

Observed band size: 69 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Pyruvate Dehydrogenase E2 Rabbit mAb [87K50L88]

Sample: HeLa cells

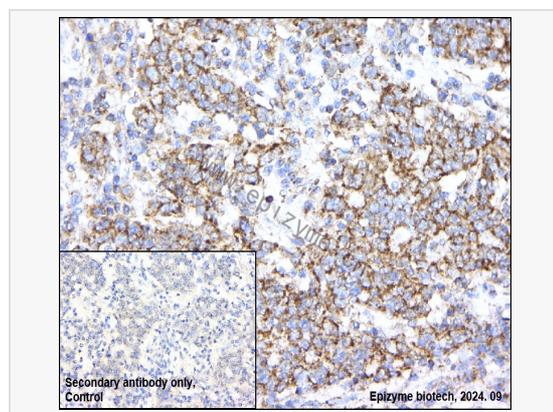
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R010220 at 1:100 dilution and alpha-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and

Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Pyruvate Dehydrogenase E2 Rabbit mAb [87K50L88]

Sample: Paraformaldehyde-fixed, paraffin embedded human gastric cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R010220 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.