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pyruvate dehydrogenase (lipoamide) alpha 1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52670

Product Information

Application	WB, ICC
Primary Accession	P08559
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	43296

Additional Information

Gene ID	5160
Other Names	mitochondrial;ODPA_HUMAN;PDH;PDHA;PDHA1;PDHCE1A;PDHE1 A type I;PDHE1-A type I;PHE1A; Pyruvate Dehydrogenase (lipoamide) alpha 1;Pyruvate dehydrogenase complex, E1 alpha polypeptide 1;Pyruvate Dehydrogenase E1 alpha;Pyruvate dehydrogenase E1 component subunit alpha;Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial;somatic form.
Dilution	WB~~1:1000 ICC~~1:100
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	PDHA1 (HGNC:8806)
Synonyms	PHE1A
Function	Together with PDHB forms the heterotetrameric E1 subunit of the pyruvate dehydrogenase (PDH) complex (PubMed:17474719, PubMed:19081061). The PDH complex catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2), and thereby links cytoplasmic glycolysis and the mitochondrial tricarboxylic acid (TCA) cycle (PubMed:19081061, PubMed:7782287). It contains multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and dihydrolipoamide dehydrogenase (E3) (Probable). The E1 subunit catalyzes both the thiamine pyrophosphate (TPP)-dependent decarboxylation of

pyruvate and the reductive acetylation of a lipoyl group covalently linked to the lipoyl-bearing domains of E2 (PubMed:17474719, PubMed:19081061, PubMed:7782287).

Cellular Location Mitochondrion matrix {ECO:0000250|UniProtKB:P26284}

Tissue Location Ubiquitous.

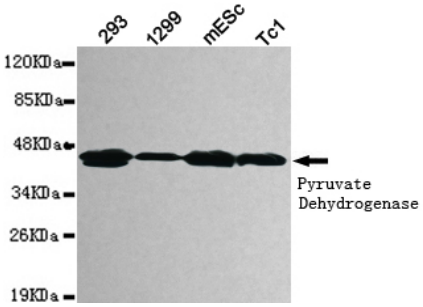
Background

The pyruvate dehydrogenase complex catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2), and thereby links the glycolytic pathway to the tricarboxylic cycle.

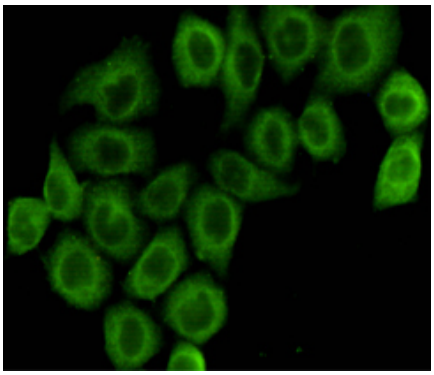
References

Koike K.,et al.Gene 93:307-311(1990).
Ho L.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:5330-5334(1989).
Huh T.L.,et al.Submitted (APR-1990) to the EMBL/GenBank/DDBJ databases.
Dahl H.-H.M.,et al.J. Biol. Chem. 262:7398-7403(1987).
Maragos C.,et al.J. Biol. Chem. 264:12294-12298(1989).

Images



Western blot detection of pyruvate dehydrogenase (lipoamide) alpha 1 in 293,1299,mEsc and Tc1 cell lysates using pyruvate dehydrogenase (lipoamide) alpha 1 mouse mAb (1:1000 diluted).Predicted band size: 43KDa.Observed band size: 43KDa.



Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-pyruvate dehydrogenase (lipoamide) alpha 1 mouse mAb(dilution 1:100).

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