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Anti-PDHA1 Antibody

Catalog # AP51420

Product Information

Application	WB, IHC
Primary Accession	P08559
Reactivity	Human, Mouse, Rat, Zebrafish, Pig, Bovine, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43296

Additional Information

Gene ID	5160
Other Names	PHE1A; Pyruvate dehydrogenase E1 component subunit alpha, somatic form mitochondrial; PDHE1-A type I
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human PDHA1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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).

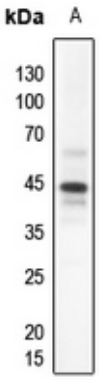
Cellular Location Mitochondrion matrix {ECO:0000250|UniProtKB:P26284}

Tissue Location Ubiquitous.

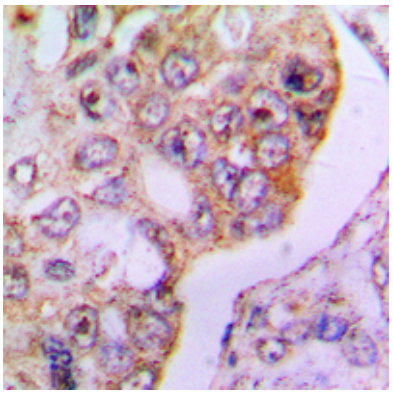
References

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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 analysis of PDHA1 expression in HepG2 (A) whole cell lysates. (Predicted band size: 43 kD; Observed band size: 43 kD)



Immunohistochemical analysis of PDHA1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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