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PDHA1 Antibody

Rabbit mAb
Catalog # AP91087

Product Information

Application	WB, IHC, IF, FC, ICC, IP, IHF
Primary Accession	P08559
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Pyruvate dehydrogenase E1 component subunit alpha, somatic form; mitochondrial; PDHE1-A type I; PDHA1; PHE1A;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	43296

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PDHA1
Description	The PDH complex is composed of multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and lipoamide dehydrogenase (E3). Catalyzes the removal of CO2 from pyruvate. Mutations in the α subunits of pyruvate dehydrogenase (E1) lead to congenital defects that are usually associated with lactic acidosis, neurodegeneration and early death.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

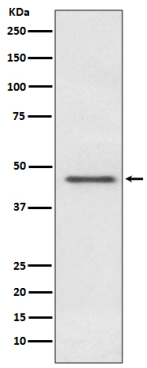
Name	PDHA1 (HGNC:8806)
Synonyms	PHE1A
Function	Together with PDHB forms the heterotetrameric E1 subunit of the pyruvate dehydrogenase (PDH) complex (PubMed:17474719, PubMed:19081061). The PDH complex catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2), and thereby links cytoplasmic glycolysis 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.

Images



Western blot analysis of PDHA1 expression in HeLa cell lysate.

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