

## Anti-PDHA1 Monoclonal Antibody (A-15B1)

Catalog #: ASZ1C1474

### Product Details

<b>Product Description:</b>	The Anti-PDHA1 antibody is a mouse monoclonal antibody recommended for immunohistochemistry, immunocytochemistry, western blot, immunoprecipitation and other applications. This antibody specifically targets human PDHA1.
<b>Host Species:</b>	Mouse
<b>Target:</b>	PDHA1
<b>Target Species:</b>	Human
<b>Specificity:</b>	This antibody reacts with human Pyruvate Dehydrogenase E1 Alpha 1 Subunit (PDHA1).
<b>Species Reactivity:</b>	Human
<b>Clonality:</b>	Monoclonal
<b>Clone ID:</b>	A-15B1
<b>Purification:</b>	The antibody was purified by affinity chromatography.
<b>Purity:</b>	>95% as determined by SDS-PAGE

### Formulation Information

<b>Concentration:</b>	1 mg/mL
<b>Sterility:</b>	0.2 µM filtered
<b>Preservative:</b>	0.02% sodium azide

### Applications

<b>Applications:</b>	Immunohistochemistry, Immunocytochemistry, Western Blot, Immunoprecipitation
<b>Recommended Dilution:</b>	Western Blot: 1:500-1:5000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry: 1:50-1:200
<b>Note:</b>	Optimal dilutions/concentrations should be determined by the end user.

### Storage & Handling

<b>Shipping:</b>	Shipped at 4°C.
<b>Storage:</b>	This antibody can be stored at 2°C-8°C for one month. For longer storage, store at -20°C. Avoid repeated freeze-thaw cycles.

## Target Details

<b>Protein Name:</b>	Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial
<b>Introduction:</b>	The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO <sub>2</sub> , and provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle. The PDH complex is composed of multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and lipoamide dehydrogenase (E3). The E1 enzyme is a heterotetramer of two alpha and two beta subunits. This gene encodes the E1 alpha 1 subunit containing the E1 active site, and plays a key role in the function of the PDH complex. Mutations in this gene are associated with pyruvate dehydrogenase E1-alpha deficiency and X-linked Leigh syndrome. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
<b>Alternative Names:</b>	PDHA; PDHAD; PDHCE1A; PHE1A
<b>Gene ID:</b>	<a href="#">5160</a>
<b>UniProt:</b>	<a href="#">P08559</a>
<b>Related Disease:</b>	Pyruvate dehydrogenase E1-alpha deficiency (PDHAD)
<b>Subcellular Location:</b>	Mitochondrion matrix.
<b>Cell Line Specificity:</b>	Low cancer specificity
<b>Function:</b>	The pyruvate dehydrogenase complex catalyzes the overall conversion of pyruvate to acetyl-CoA and CO <sub>2</sub> , and thereby links the glycolytic pathway to the tricarboxylic cycle.