

## Rabbit anti-Human PDHA1 Monoclonal Antibody | anti-PDHA1 antibody

PDHA1 Rabbit mAb

| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                                                 |
|-----------|--------|------------|--------------------------------------------------------------|
| AAA282640 | Rabbit | Human      | ELISA, Immunocytochemistry, Immunofluorescence, Western Blot |

### PRODUCT SYNONYMS

PDHA1; Monoclonal Antibody; PDHA1 Rabbit mAb; PDHA; PDHAD; PHE1A; E1alpha; PDHCE1A; anti-PDHA1 antibody

### PRODUCT SPECIFICATIONS

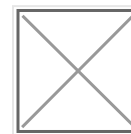
|                                                 |                                                                                                               |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                        |
| Reactivity                                      | Human                                                                                                         |
| Clonality                                       | Monoclonal                                                                                                    |
| Isotype                                         | IgG                                                                                                           |
| Purity/Purification                             | Affinity purification                                                                                         |
| Form/Format                                     | PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.                                                  |
| Sequence                                        | PPVTTVLTRE DGLKYRMMQ TVRRMELKAD QLYKQKIIRG FCHLCDGQEA CCVGLEAGIN PTDHLITAYR AHGFTFTRGL SVREILAELT GRKGCAKKG G |
| Applicable Applications for anti-PDHA1 antibody | ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)                                  |
| Cross Reactivity                                | Human, Mouse, Rat                                                                                             |
| Immunogen                                       | A synthetic peptide corresponding to a sequence within amino acids 50-150 of human PDHA1 (P08559).            |
| Preparation and Storage                         | Store at -20 degree C. Avoid freeze/thaw cycles.                                                              |

### IMAGES



#### ICC (Immunocytochemistry)

Confocal imaging of C2C12 cells using PDHA1 Rabbit mAb (AAA282640, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\gamma$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



#### WB (Western Blot)

Western blot analysis of various lysates using PDHA1 Rabbit mAb (AAA282640) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 3s.

### ADDITIONAL INFORMATION

#### Related Product Information for anti-PDHA1 antibody

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.

|                                                   |                                                                                                                                                         |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Categories/Family for anti-PDHA1 antibody | Cancer; Signal Transduction; Endocrine Metabolism; Mitochondrial metabolism; Mitochondrial markers; Carbohydrate metabolism; Warburg Effect; Antibodies |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                            |                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------|
| NCBI GI #                  | 4505685                                                                                |
| NCBI GeneID                | 5160                                                                                   |
| NCBI Accession #           | NP_000275.1                                                                            |
| NCBI GenBank Nucleotide #  | NM_000284.3                                                                            |
| UniProt Accession #        | P08559; Q53H41; Q5JPT8; Q9NP12; Q9UBJ8; Q9UBU0; Q9UNG4; Q9UNG5; A5YVE9; B7Z3T7; B7Z3X5 |
| Molecular Weight           | Calculated MW: 43kDa<br>Observed MW: 43kDa                                             |
| UniProt Protein Name       | Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial         |
| UniProt Gene Name          | PDHA1                                                                                  |
| UniProt Synonym Gene Names | PHE1A                                                                                  |
| UniProt Entry Name         | ODPA_HUMAN                                                                             |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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 Online datasheet: <https://stage.aaabiotech.com/monoclonal/pdha1-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/282640>