**Product Datasheet**

# PDHA1 Antibody

Catalog No: #32489

Package Size: #32489-1 50ul #32489-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

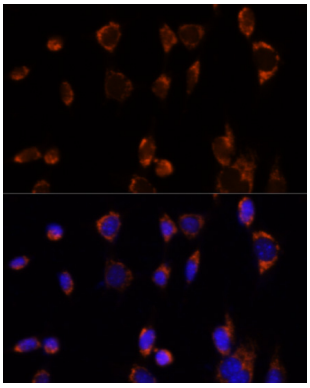
## Description

| | |
|---|---|
| Product Name | PDHA1 Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | Antibodies were purified by affinity purification using immunogen. |
| Applications | WB,IHC,IF |
| Species Reactivity | Human,Mouse,Rat |
| Specificity | The antibody detects endogenous level of total PDHA1 protein. |
| Immunogen Type | Recombinant Protein |
| Immunogen Description | Recombinant protein of human PDHA1. |
| Target Name | PDHA1 |
| Other Names | PDHA; PDHCE1A; PHE1A; |
| Accession No. | Swiss-Prot:P08559NCBI Gene ID:5160 |
| Uniprot | P08559 |
| GeneID | 5160; |
| SDS-PAGE MW | 43KD |
| Concentration | 1.0mg/ml |
| Formulation | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at -20°C |

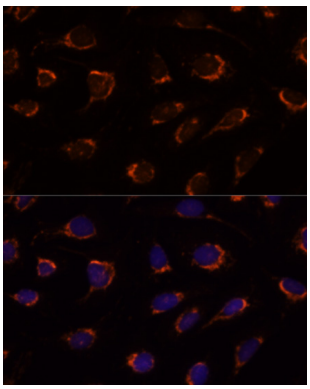
## Application Details

WB□1:500 - 1:2000IHC□1:50 - 1:200IF□1:50 - 1:200IP□1:20 - 1:50

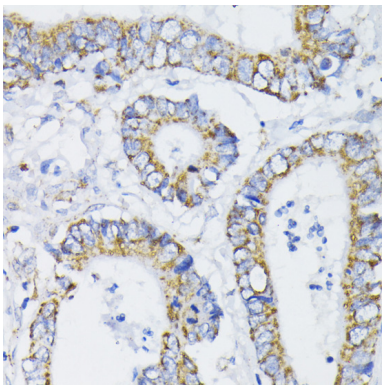
## Images



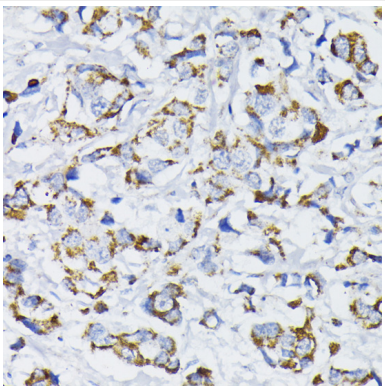
Immunofluorescence analysis of NIH-3T3 cells using PDHA1 at dilution of 1:100. Blue: DAPI for nuclear staining.



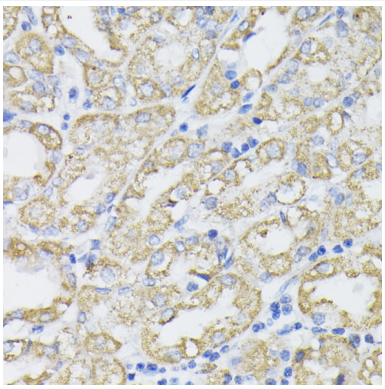
Immunofluorescence analysis of U-2 OS cells using PDHA1 at dilution of 1:100. Blue: DAPI for nuclear staining.



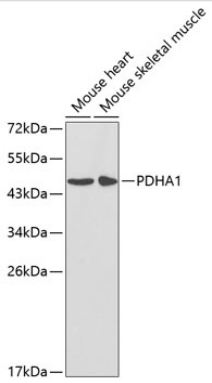
Immunohistochemistry of paraffin-embedded human colon carcinoma using PDHA1 at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded human mammary cancer using PDHA1 at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded human stomach using PDHA1 at dilution of 1:200 (40x lens).




Western blot analysis of extracts of various cell lines, using PDHA1 at 1:1000 dilution.

## Background

The pyruvate dehydrogenase complex catalyzes the conversion of pyruvate and CoA into acetyl-CoA and CO2 in the presence of NAD+. Acetyl-CoA then goes into the citric acid cycle where it reacts with oxaloacetate to form citrate. Acetyl-CoA is also used for fatty acid and cholesterol biosynthesis. The reaction of oxidative decarboxylation of pyruvate therefore serves as a critical link between glycolysis and the citric acid cycle and lipid metabolism. In mammalian cells, the pyruvate dehydrogenase complex is located in the mitochondrial matrix (1). This complex is comprised of three enzymes: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and dihydrolipoamide dehydrogenase (E3). Pyruvate dehydrogenase (E1) consists of two subunits: α and β. This enzyme 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 (2).

Note: This product is for in vitro research use only