

PDHA1 Conjugated Antibody

Catalog No: #C32489



Package Size: #C32489-AF350 100ul #C32489-AF405 100ul #C32489-AF488 100ul
 #C32489-AF555 100ul #C32489-AF594 100ul #C32489-AF647 100ul
 #C32489-AF680 100ul #C32489-AF750 100ul #C32489-Biotin 100ul

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

Description

| | |
|-----------------------|--|
| Product Name | PDHA1 Conjugated Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Species Reactivity | Hu Ms Rt |
| Specificity | The antibody detects endogenous level of total PDHA1 protein. |
| Immunogen Description | Recombinant protein of human PDHA1. |
| Conjugates | Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750 |
| Other Names | PDHA;PDHCE1A;PHE1A |
| Accession No. | Swiss-Prot#:P08559NCBI Gene ID:5160 |
| Uniprot | P08559 |
| GeneID | 5160; |
| Excitation Emission | AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm |
| Calculated MW | 43 |
| Formulation | 0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide |
| Storage | Store at 4°C in dark for 6 months |

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Product Description

Antibodies were purified by affinity purification using immunogen.

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