

ARG57546 anti-PDHX / Pyruvate dehydrogenase antibody [1E11]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [1E11] recognizes PDHX / Pyruvate dehydrogenase
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	1E11
Isotype	IgG1, kappa
Target Name	PDHX / Pyruvate dehydrogenase
Species	Human
Immunogen	Recombinant Human PDHX (aa. 54-501) purified from E. coli.
Conjugation	Un-conjugated
Alternate Names	Lipoyl-containing pyruvate dehydrogenase complex component X; OPDX; proX; E3-binding protein; Dihydrolipoamide dehydrogenase-binding protein of pyruvate dehydrogenase complex; E3BP; PDX1; Pyruvate dehydrogenase protein X component, mitochondrial; DLDBP

Application Instructions

Application table	Application	Dilution
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

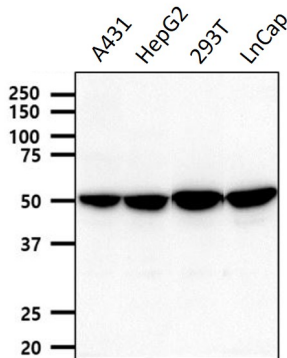
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PDHX
Gene Full Name	pyruvate dehydrogenase complex, component X
Background	<p>The pyruvate dehydrogenase (PDH) complex is located in the mitochondrial matrix and catalyzes the conversion of pyruvate to acetyl coenzyme A. The PDH complex thereby links glycolysis to Krebs cycle. The PDH complex contains three catalytic subunits, E1, E2, and E3, two regulatory subunits, E1 kinase and E1 phosphatase, and a non-catalytic subunit, E3 binding protein (E3BP). This gene encodes the E3 binding protein subunit; also known as component X of the pyruvate dehydrogenase complex. This protein tethers E3 dimers to the E2 core of the PDH complex. Defects in this gene are a cause of pyruvate dehydrogenase deficiency which results in neurological dysfunction and lactic acidosis in infancy and early childhood. This protein is also a minor antigen for antimitochondrial antibodies. These autoantibodies are present in nearly 95% of patients with the autoimmune liver disease primary biliary cirrhosis (PBC). In PBC, activated T lymphocytes attack and destroy epithelial cells in the bile duct where this protein is abnormally distributed and overexpressed. PBC eventually leads to cirrhosis and liver failure. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Oct 2009]</p>
Function	<p>Required for anchoring dihydrolipoamide dehydrogenase (E3) to the dihydrolipoamide transacetylase (E2) core of the pyruvate dehydrogenase complexes of eukaryotes. This specific binding is essential for a functional PDH complex. [UniProt]</p>
Calculated Mw	54 kDa
PTM	Delipoylated at Lys-97 by SIRT4, delipoylation decreases the PHD complex activity. [UniProt]

Images



ARG57546 anti-PDHX / Pyruvate dehydrogenase antibody [1E11] WB image

Western blot: 40 µg of A431, HepG2, 293T and LnCap cell lysates stained with ARG57546 anti-PDHX / Pyruvate dehydrogenase antibody [1E11] at 1:1000 dilution.