

**PDX1 Antibody (T11)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2034d**

**Specification**

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**PDX1 Antibody (T11) - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">O00330</a>
Other Accession	<a href="#">P52947</a> , <a href="#">P52946</a> , <a href="#">P52945</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54122
Antigen Region	1-30

**PDX1 Antibody (T11) - Additional Information**

**Gene ID** 8050

**Other Names**

Pyruvate dehydrogenase protein X component, mitochondrial, Dihydrolipoamide dehydrogenase-binding protein of pyruvate dehydrogenase complex, E3-binding protein, E3BP, Lipoyl-containing pyruvate dehydrogenase complex component X, proX, PDHX, PDX1

**Target/Specificity**

This PDX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from human PDX1.

**Dilution**

IF~~1:100  
WB~~1:1000  
IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PDX1 Antibody (T11) is for research use only and not for use in diagnostic or therapeutic procedures.

**PDX1 Antibody (T11) - Protein Information**

**Name** PDHX

**Synonyms** PDX1

**Function** 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.

**Cellular Location**

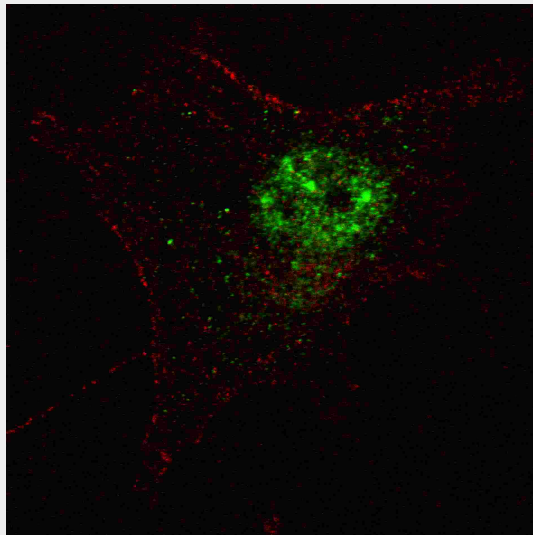
Mitochondrion matrix.

### **PDX1 Antibody (T11) - Protocols**

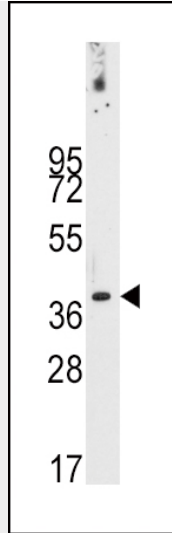
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

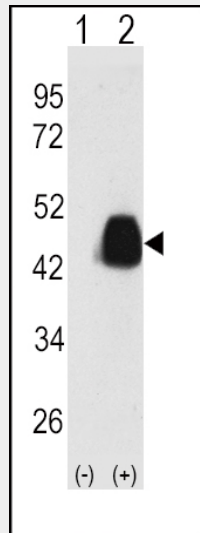
### **PDX1 Antibody (T11) - Images**



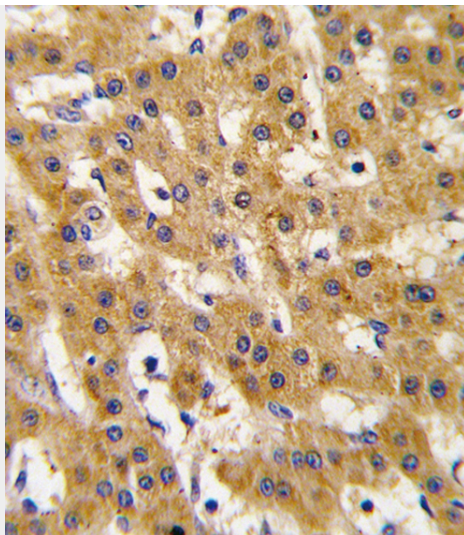
Fluorescent confocal image of SY5Y cells stained with PDX1 (T11) antibody. SY5Y cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AP2034d PDX1 (T11) primary antibody (1:100, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/ml, 5 min). Note the highly specific localization of the PDX1 immunosignal to the nucleus, supported by Human Protein Atlas Data (<http://www.proteinatlas.org/ENSG00000110435>).



Western blot analysis of anti-PDX1 Antibody (T11) (Cat.#AP2034d) in NCI-H460 cell line lysates (35ug/lane).PDX1-T11(arrow) was detected using the purified Pab.



Western blot analysis of PDX1 (arrow) using PDX1 Antibody (T11) (Cat.#AP2034d). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PDX1 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with Phospho-PDX1-T11.ctrl antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

#### **PDX1 Antibody (T11) - Background**

PDX1, located in the mitochondrial matrix, is 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. Eukaryotic pyruvate dehydrogenase complexes are organized about a core consisting of the oligomeric dihydrolipoamide acetyl-transferase, around which are arranged multiple copies of pyruvate dehydrogenase, dihydrolipoamide dehydrogenase and protein X bound by noncovalent bonds. Defects in PDHX are a cause of lacticacidemia. PDX1 belongs to the 2-oxoacid dehydrogenase family and contains 1 lipoyl-binding domain.

#### **PDX1 Antibody (T11) - References**

References for protein:

- 1.Ling, M., et al., Hum. Mol. Genet. 7(3):501-505 (1998).
- 2.Aral, B., et al., Am. J. Hum. Genet. 61(6):1318-1326 (1997).
- 3.Harris, R.A., et al., J. Biol. Chem. 272(32):19746-19751 (1997).
- 4.Yu, W., et al., Genome Res. 7(4):353-358 (1997).

References for SY5Y (SH-SY5Y; ATCC#CRL-2266): 1. Ross RA, et al. Coordinate morphological and biochemical interconversion of human neuroblastoma cells. J. Natl. Cancer Inst. 71: 741-749, 1983. [PubMed: 6137586]; 2. Biedler JL, et al. Multiple neurotransmitter synthesis by human neuroblastoma cell lines and clones. Cancer Res. 38: 3751-3757, 1978. [PubMed: 29704]