

**PDX1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1692a****Specification****PDX1 Antibody - Product Information**

Application	<b>E, WB, FC</b>
Primary Accession	<a href="#">P52945</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>30.8kDa KDa</b>

**Description**

The protein encoded by this gene is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. The encoded nuclear protein is involved in the early development of the pancreas and plays a major role in glucose-dependent regulation of insulin gene expression. Defects in this gene are a cause of pancreatic agenesis, which can lead to early-onset insulin-dependent diabetes mellitus (NIDDM), as well as maturity onset diabetes of the young type 4 (MODY4).

**Immunogen**

Purified recombinant fragment of human PDX1 expressed in E. Coli. <br />

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**PDX1 Antibody - Additional Information**

**Gene ID** 3651

**Other Names**

Pancreas/duodenum homeobox protein 1, PDX-1, Glucose-sensitive factor, GSF, Insulin promoter factor 1, IPF-1, Insulin upstream factor 1, IUF-1, Islet/duodenum homeobox-1, IDX-1, Somatostatin-transactivating factor 1, STF-1, PDX1, IPF1, STF1

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
FC~~1/200 - 1/400

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

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

## PDX1 Antibody - Protein Information

**Name** PDX1

**Synonyms** IPF1, STF1

### Function

Activates insulin, somatostatin, glucokinase, islet amyloid polypeptide and glucose transporter type 2 gene transcription. Particularly involved in glucose-dependent regulation of insulin gene transcription. As part of a PDX1:PBX1b:MEIS2b complex in pancreatic acinar cells is involved in the transcriptional activation of the ELA1 enhancer; the complex binds to the enhancer B element and cooperates with the transcription factor 1 complex (PTF1) bound to the enhancer A element. Binds preferentially the DNA motif 5'-[CT]TAAT[TG]-3'. During development, specifies the early pancreatic epithelium, permitting its proliferation, branching and subsequent differentiation. At adult stage, required for maintaining the hormone-producing phenotype of the beta-cell.

### Cellular Location

Nucleus. Cytoplasm, cytosol.

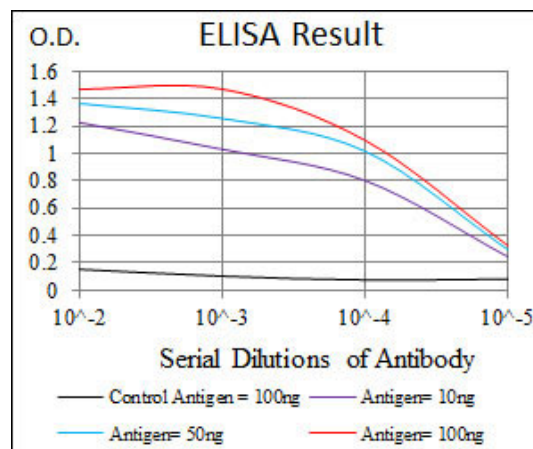
### Tissue Location

Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells)

## PDX1 Antibody - 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](#)



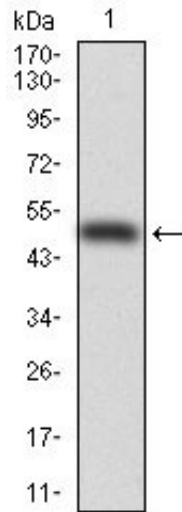


Figure 1: Western blot analysis using PDX1 mAb against human PDX1 (AA: 39-283) recombinant protein. (Expected MW is 52 kDa)

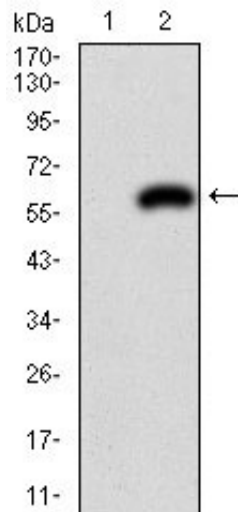


Figure 2: Western blot analysis using PDX1 mAb against HEK293 (1) and PDX1 (AA: 39-283)-hIgGFc transfected HEK293 (2) cell lysate.

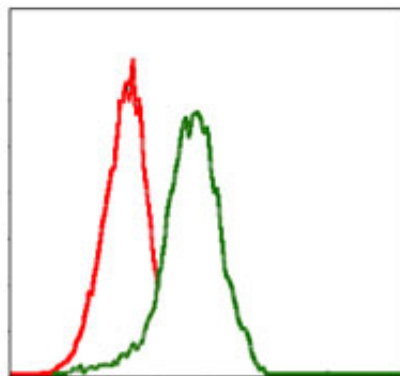


Figure 3: Flow cytometric analysis of Jurkat cells using PDX1 mouse mAb (green) and negative control (red).

**PDX1 Antibody - References**

J Biol Chem. 2009 Dec 25;284(52):36482-90. Pancreatology. 2009;9(1-2):116-26.