

**PDX1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7740a**

**Specification**

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**PDX1 Antibody (N-term) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P52945</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>30771</b>
Antigen Region	<b>40-69</b>

**PDX1 Antibody (N-term) - 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

**Target/Specificity**

This PDX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 40-69 amino acids from the N-terminal region of human PDX1.

**Dilution**

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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PDX1 Antibody (N-term) - 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

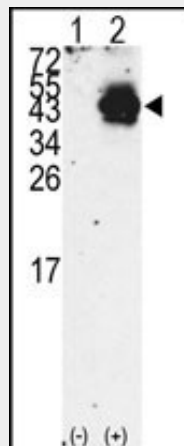
Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells)

## PDX1 Antibody (N-term) - Protocols

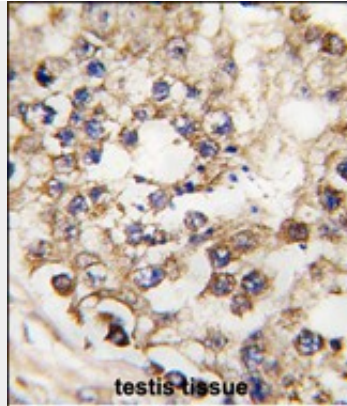
Provided below are standard protocols that you may find useful for product applications.

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

## PDX1 Antibody (N-term) - Images



Western blot analysis of PDX1 (arrow) using rabbit polyclonal PDX1 Antibody (N-term) (RB10459). 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 testis tissue reacted with PDX1 Antibody (N-term) (Cat.#AP7740a), 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 (N-term) - Background**

PDX1 is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. This 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 the gene encoding PDX1 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).

#### **PDX1 Antibody (N-term) - References**

Ma,J., Carcinogenesis 29 (7), 1327-1333 (2008)  
Watada,H., Biochem. Biophys. Res. Commun. 229 (3), 746-751 (1996)