

### KD-Validated Anti-Pancreatic And Duodenal Homeobox 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1677

### **Specification**

# KD-Validated Anti-Pancreatic And Duodenal Homeobox 1 Rabbit Monoclonal Antibody - Product Information

Application WB, FC Primary Accession P52945

Reactivity
Rat, Human
Clonality
Monoclonal
Isotype
Rabbit IgG

Calculated MW Predicted, 31 kDa , observed, 42 kDa KDa

Gene Name PDX1

Aliases PDX1; Pancreatic And Duodenal Homeobox

1; IDX-1; STF-1; PDX-1; IUF-1; GSF; Islet/Duodenum Homeobox-1; Insulin Upstream Factor 1; Glucose-Sensitive Factor; MODY4; IPF1; Insulin Promoter Factor 1, Homeodomain Transcription Factor; Somatostatin-Transactivating Factor 1; Pancreas/Duodenum Homeobox Protein 1; Somatostatin Transcription Factor 1; Pancreatic-Duodenal Homeobox

Factor 1; Insulin Promoter Factor 1;

PAGEN1; IUF1; STF1

Immunogen A synthesized peptide derived from human

PDX1

# KD-Validated Anti-Pancreatic And Duodenal Homeobox 1 Rabbit Monoclonal 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

## KD-Validated Anti-Pancreatic And Duodenal Homeobox 1 Rabbit Monoclonal 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**

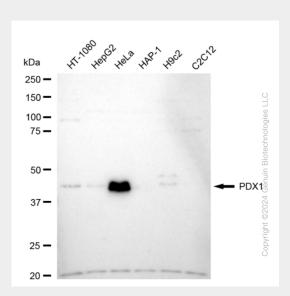
Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells)

# KD-Validated Anti-Pancreatic And Duodenal Homeobox 1 Rabbit Monoclonal Antibody - Protocols

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

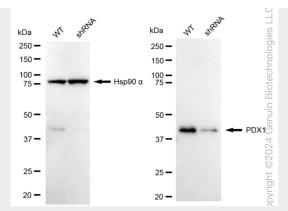
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# KD-Validated Anti-Pancreatic And Duodenal Homeobox 1 Rabbit Monoclonal Antibody - Images

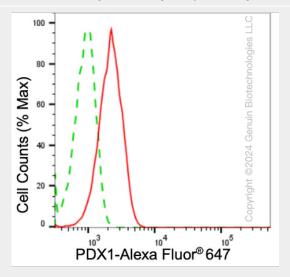


Western blotting analysis using anti-PDX1 antibody (Cat#AGI1677). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-PDX1 antibody (Cat#AGI1677, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-PDX1 antibody (Cat#AGI1677). PDX1 expression in wild type (WT) and PDX1 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-PDX1 antibody (Cat#AGI1677, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of PDX1 expression in HeLa cells using anti-PDX1 antibody (Cat#AGI1677, 1:2,000). Green, isotype control; red, PDX1.