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PDX1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20965b

Product Information

Application	WB, E
Primary Accession	P52945
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51570
Calculated MW	30771

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 a rabbit immunized with a KLH conjugated synthetic peptide between 21-55 amino acids from the N-terminal region of human PDX1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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.

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)

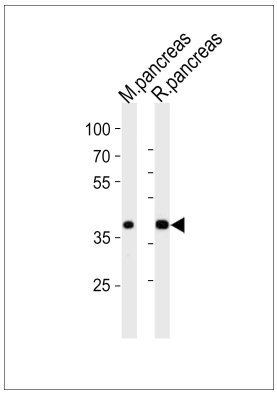
Background

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.

References

Stoffel M.,et al.Genomics 28:125-126(1995).
Inoue H.,et al.Diabetes 45:789-794(1996).
Hiroshi I.,et al.Submitted (JUN-1995) to the EMBL/GenBank/DDBJ databases.
Marshak S.,et al.Submitted (AUG-1996) to the EMBL/GenBank/DDBJ databases.
Hara M.,et al.Submitted (DEC-1997) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of lysates from mouse pancreas and rat pancreas tissue (from left to right), using PDX1 Antibody (N-term)(Cat. #AP20965b). AP20965b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.