

Product datasheet

Anti-PDX1 antibody - C-terminal ab72324

1 Image

Overview

Product name	Anti-PDX1 antibody - C-terminal
Description	Rabbit polyclonal to PDX1 - C-terminal
Host species	Rabbit
Tested applications	Suitable for: WB, ELISA
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human PDX1 (C terminal) conjugated to keyhole limpet haemocyanin.
Positive control	HepG2 cell line lysate.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: PBS
Purity	Ammonium Sulphate Precipitation
Purification notes	ab72324 is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab72324** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

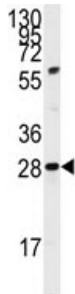
Application	Abreviews	Notes
WB		1/50 - 1/100. Detects a band of approximately 28 kDa (predicted molecular weight: 31 kDa).

Application	Abreviews	Notes
ELISA		1/1000.

Target

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. 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.
Tissue specificity	Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells).
Involvement in disease	<p>Defects in PDX1 are a cause of pancreatic agenesis (PAC) [MIM:260370]. This autosomal recessive disorder is characterized by absence or hypoplasia of pancreas, leading to early-onset insulin-dependent diabetes mellitus. This was found in a frameshift mutation that produces a truncated protein and results in a second initiation that produces a second protein that act as a dominant negative mutant.</p> <p>Defects in PDX1 are a cause of non-insulin-dependent diabetes mellitus (NIDDM) [MIM:125853]; also known as diabetes mellitus type 2. NIDDM is characterized by an autosomal dominant mode of inheritance, onset during adulthood and insulin resistance.</p> <p>Defects in PDX1 are the cause of maturity-onset diabetes of the young type 4 (MODY4) [MIM:606392]; also symbolized MODY-4. MODY is a form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the beginning of the disease.</p>
Sequence similarities	<p>Belongs to the Antp homeobox family. IPF1/XIHbox-8 subfamily.</p> <p>Contains 1 homeobox DNA-binding domain.</p>
Domain	<p>The Antp-type hexapeptide mediates heterodimerization with PBX on a regulatory element of the somatostatin promoter.</p> <p>The homeodomain, which contains the nuclear localization signal, not only mediates DNA-binding, but also acts as a protein-protein interaction domain for TCF3(E47), NEUROD1 and HMG-I(Y).</p>
Post-translational modifications	Phosphorylated by the SAPK2 pathway at high intracellular glucose concentration.
Cellular localization	Nucleus.

Images



Western blot - Anti-PDX1 antibody - C-terminal
(ab72324)

Anti-PDX1 antibody - C-terminal (ab72324) at 1/60 dilution +
HepG2 cell line lysate at 35 µg

Predicted band size: 31 kDa

Observed band size: 28 kDa

[why is the actual band size different from the predicted?](#)

Additional bands at: 60 kDa. We are unsure as to the identity of
these extra bands.

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