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Product datasheet

Anti-PDX1 antibody ab47267

★★★★★ 16 Abreviews 97 References 画像数 4

製品の概要

製品名 Anti-PDX1 antibody

製品の詳細 Rabbit polyclonal to PDX1

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, IHC-P

種交差性 交差種: Human

免疫原 Recombinant fragment corresponding to Mouse PDX1 (N terminal).

Database link: P52946

特記事項

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

精製度 Whole antiserum

ポリ/モノ ポリクローナル

アイソタイプ IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab47267の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF	★★★★★(3)	1/2000. See ICC-specific protocol in protocol tab.
IHC-P	****(6)	Use at an assay dependent concentration. See IHC-specific protocol in protocol tab.

ターゲット情報

機能

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.

組織特異性

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

関連疾患

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.

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.

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.

配列類似性

Belongs to the Antp homeobox family. IPF1/XIHbox-8 subfamily.

Contains 1 homeobox DNA-binding domain.

ドメイン

The Antp-type hexapeptide mediates heterodimerization with PBX on a regulatory element of the

somatostatin promoter.

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).

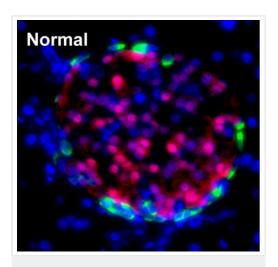
翻訳後修飾

Phosphorylated by the SAPK2 pathway at high intracellular glucose concentration.

細胞内局在

Nucleus.

画像

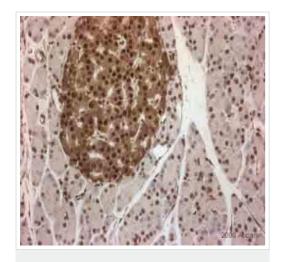


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDX1 antibody (ab47267)

Image from Zhang Yet al., PLoS One. 2012;7(5):e36675. Epub 2012 May 7. Fig 7.; doi:10.1371/journal.pone.0036675; May 7, 2012, PLoS ONE 7(5): e36675.

Immunohistochemical analysis of murine pancreatic islets, staining PDX1 (red) with ab47267.

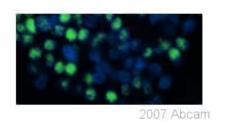
Tissue was fixed in formalin, permeablized with 0.25% Triton X-100, and blocked in blocking solution for 1 hour at room temperature; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody overnight at 4°C and a fluorescent-conjugated anti-rabbit lgG was used as the secondary antibody.



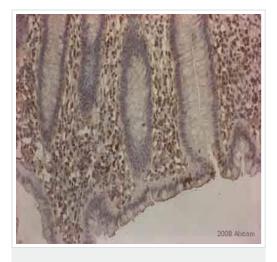
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDX1 antibody (ab47267)

This image is courtesy of Antibody Solutions Ltd.

ab47267 staining PDX1 in rat pancreatic tissue sections by immunohistochemistry (Formalin/PFA-fixed paraffin embedded sections). Tissue underwent fixation in formaldehyde, heat mediated antigen retrieval in citrate buffer pH6.0 and blocking for 15 minutes at 20°C. The primary antibody was diluted 1/500 and incubated with sample for 45 minutes at 20°C. A HRP-conjugated goat polyclonal to rabbit lgG was used undiluted as secondary.



Immunocytochemistry/ Immunofluorescence - Anti-PDX1 antibody (ab47267) Immunostaining of islet-epithelial clusters from human foetal pancreata with ab47267 (green). Nuclei are visualised with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PDX1 antibody (ab47267)

This image is courtesy of Antibody Solutions Ltd.

ab47267 staining PDX1 in human appendix tissue sections by immunohistochemistry (Formalin/PFA-fixed paraffin embedded sections). Tissue underwent fixation in formaldehyde, heat mediated antigen retrieval in citrate buffer pH6.0 and blocking for 15 minutes at 20°C (5 minutes for peroxide block and 10 minutes for protein block). The primary antibody was diluted 1/500 and incubated with sample for 45 minutes at 20°C. A HRP-conjugated goat polyclonal to rabbit IgG was used undiluted as the secondary.

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