

Anti-PDX1 antibody [OT12A12] ab84987

[5 References](#) [5 图像](#)

概述

产品名称	Anti-PDX1抗体[OT12A12]
描述	小鼠单克隆抗体[OT12A12] to PDX1
宿主	Mouse
经测试应用	适用于: WB, IHC-P, ICC/IF
种属反应性	与反应: Human
免疫原	Recombinant full length protein, corresponding to amino acids 1-283 of human PDX1 expressed in <i>E. coli</i> .
阳性对照	IHC-P: pancreas; carcinoma of pancreas WB: HEK293T cells transfected with PDX1; lysate from 293T cells transfected with PDX1 ICC/IF: HeLa cells transiently transfected by PDX1; HeLa cells
常规说明	The clone number has been updated from 2A12 to OT12A12, both clone numbers name the same clone.

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

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 1% BSA, 50% Glycerol, PBS
纯度	Immunogen affinity purified
纯化说明	Purified from TCS
克隆	单克隆

克隆编号 OT12A12
同种型 IgG1

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab84987于以下的经测试应用

“应用说明”部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/20000. Predicted molecular weight: 31 kDa.
IHC-P		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

靶标

功能 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.

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

疾病相关 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.

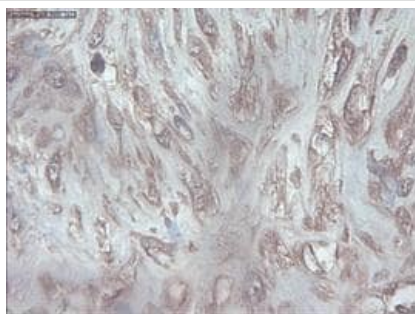
序列相似性 Belongs to the Antp homeobox family. IPF1/XI Hbox-8 subfamily.
Contains 1 homeobox DNA-binding domain.

结构域 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).

翻译后修饰 Phosphorylated by the SAPK2 pathway at high intracellular glucose concentration.

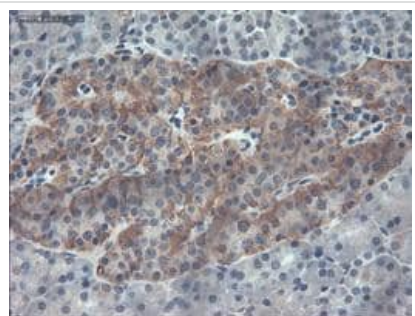
细胞定位 Nucleus.

图片



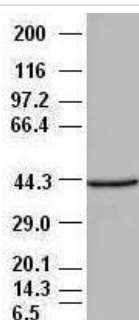
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDX1 antibody [OT12A12] (ab84987)

ab84987, staining PDX1 in paraffin embedded human pancreas carcinoma tissue by Immunohistochemistry.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDX1 antibody [OT12A12] (ab84987)

ab84987, staining PDX1 in paraffin embedded human pancreas by Immunohistochemistry.

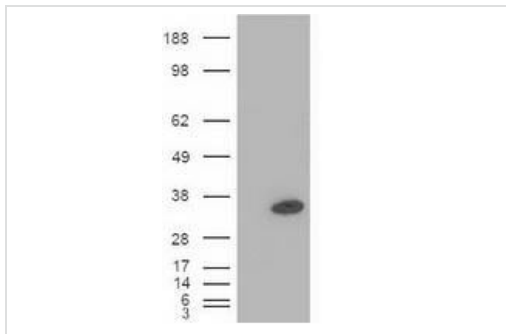


Western blot - Anti-PDX1 antibody [OT12A12] (ab84987)

Anti-PDX1 antibody [OT12A12] (ab84987) at 1/20000 dilution + lysate from HEK293T cells transfected with human PDX1 expression vector

Predicted band size: 31 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC200033)



Western blot - Anti-PDX1 antibody [OTI2A12]
(ab84987)

All lanes : Anti-PDX1 antibody [OTI2A12] (ab84987)

Lane 1 : lysate from HEK293T cells transfected with an empty expression vector

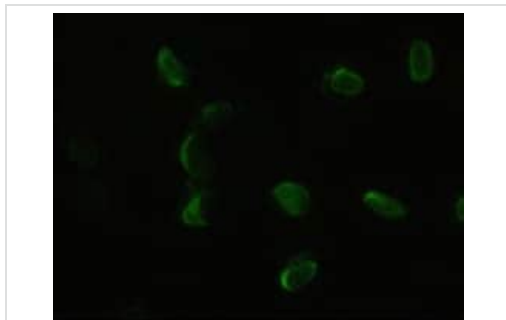
Lane 2 : lysate from HEK293T cells transfected with a human PDX1 expression vector

Lysates/proteins at 5 µg per lane.

Predicted band size: 31 kDa

Observed band size: 31 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC200033)



Immunocytochemistry/ Immunofluorescence - Anti-PDX1 antibody [OTI2A12] (ab84987)

ab84987, staining PDX1 by Immunofluorescence in HeLa cells transiently transfected with a vector expressing PDX1.

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