

Product datasheet for TA336928

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

PDX1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ICC/IF, IHC, WB

Recommended Dilution: Western Blot: 1.0 ug/ml, Immunohistochemistry-Paraffin: 1:200, Immunohistochemistry:

1:200, Immunocytochemistry/ Immunofluorescence: 1:200 - 1:500

Reactivity: Human, Mouse

Host: Rabbit

Clonality: Polyclonal

Immunogen: A synthetic peptide made to a C-terminal portion of the human PDX1 protein (between

residues 100-200) [UniProt P52945]

Formulation: PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

Concentration: lot specific

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: pancreatic and duodenal homeobox 1

Database Link: NP 000200

Entrez Gene 18609 MouseEntrez Gene 3651 Human

P52945





Background:

PDX1, also known as IDX-1, IPF-1, STF-1, and MODY4 is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. During development, PDX1 specifies the early pancreatic epithelium, permitting its proliferation, branching and subsequent differentiation. At adult stage, it is required for maintaining the hormone-producing phenotype of the beta-cell. PDX1 is located in both the nucleus and cytosol on a cellular level, while in tissue it is distinct to the duodenum and pancreas. Defects in PDX1 gene are a cause of pancreatic agenesis, which can lead to early-onset insulin-dependent diabetes mellitus (NIDDM), as well as maturity onset diabetes of the young type 4 (MODY4). Recently, research of PDX1 ranges from an important role in the malaria parasite (PMID: 23039077) to mutations in PDX1 leading to neonatal diabetes (PMID: 20009086).

Synonyms: GSF; IDX-1; IPF1; IUF1; MODY4; PAGEN1; PDX-1; STF-1

Note: This PDX1 antibody is useful for Western blot, Immunohistochemistry paraffin embedded

sections and Immunocytochemistry/Immunofluorescence. In Western blot a band is observed ~40 kDa, and in ICC/IF diffuse nuclear and cytoplasmic staining is observed. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is

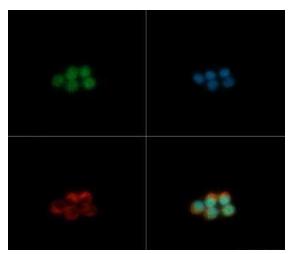
recommended.

Protein Families: Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription

Factors

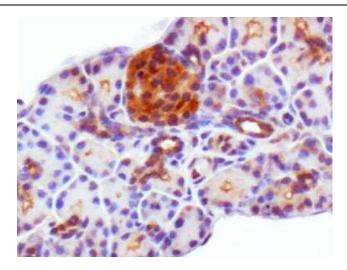
Protein Pathways: Maturity onset diabetes of the young, Type II diabetes mellitus

Product images:

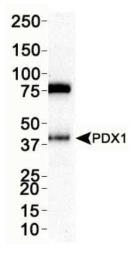


Immunocytochemistry/Immunofluorescence: PDX1 Antibody TA336928 - PDX1 antibody was tested in INS1 cells with FITC (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).





Immunohistochemistry: PDX1 Antibody TA336928 - IHC analysis of PDX1 in mouse pancreas.



Western Blot: PDX1 Antibody TA336928 - WB analysis of PDX1 in INS1 cell lysate.