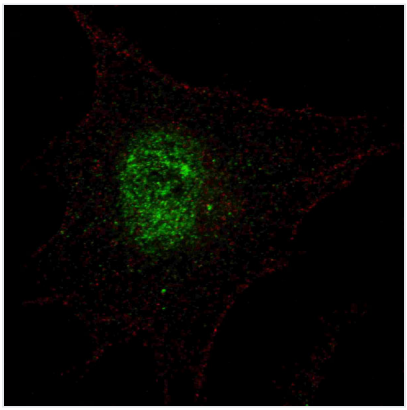
PDX1 Antibody – Rabbit Polyclonal

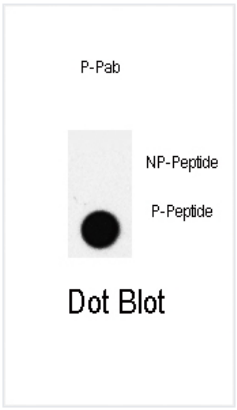
PRODUCT OVERVIEW

Product Name	PDX1, Polyclonal Antibody
Full Product Name	PDX1, Phosphorylated (T11) (PDX1, IPF1, Pancreas/duodenum homeobox protein 1, Glucose-sensitive factor, Insulin promoter factor 1, Insulin upstream factor 1, Islet/duodenum homeobox-1, Somatostatin-transactivating factor 1) (FITC)
Product Gene Name	anti-PDX1 antibody
Product Synonym Names	PDX1; IPF1; Pancreas/duodenum homeobox protein 1; Glucose-sensitive factor; Insulin promoter factor 1; Insulin upstream factor 1; Islet/duodenum homeobox-1; Somatostatin-transactivating factor 1
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Fluorescein Isothiocyanate (FITC).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: FITC conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	30,771 Da
OMIM	125853
3D Structure	ModBase 3D Structure for P52945
Immunogen	Phospho-PDX1-T11 antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide between 1~30 amino acids surrounding T11 of human PDX1.
Conjugate	FITC
Antigen Modification	Phosphorylated
Note	Preservative Free
Special Handling	Light sensitive
Product Categories/Family for anti-PDX1 antibody	Antibodies; Transcription Factors; Zinc; Ring; Homeobox
Applications Tested/Suitable for anti-PDX1 antibody	FLISA, Dot Blot (DB)
Application Notes for anti-PDX1 antibody	FLISA: 1:1,000 Applications are based on unconjugated antibody.
Related Product Information for anti-PDX1 antibody	PDX1 is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. The encoded nuclear protein is involved in the early development of the pancreas and plays a major role in glucose-dependent regulation of insulin gene expression. Defects in this protein 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).

Product References and Citations for anti-PDX1 antibody	Nicolino, M., et.al., Diabetes 59 (3), 733-740 (2010). Cai, J., et.al., J Mol Cell Biol 2 (1), 50-60 (2010).
Other Notes	Small volumes of anti-PDX1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PDX1 purchase	MBS6332543 is an antibody targeting PDX1. Also known as PDX1, Phosphorylated (T11) (PDX1, IPF1, Pancreas/duodenum homeobox protein 1, Glucose-sensitive factor, Insulin promoter factor 1, Insulin upstream factor 1, Islet/duodenum homeobox-1, Somatostatin-transactivating factor 1) (FITC). Reactive in Human. Host: Rabbit.



Immunofluorescence (IF) of anti-PDX1 antibody
Fluorescent confocal image of SY5Y cells stained with phospho-PDX1-T11 antibody. SY5Y cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AP3669a phospho-PDX1-T11 primary antibody (1:100, 2 h at room temperature). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 ug/ml, 5 min). Note the highly specific localization of the phospho-PDX1 immunosignal mainly to the nucleus.



Dot Blot (DB) of anti-PDX1 antibody
Dot blot analysis of PDX1 Antibody (T11) Pab on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PDX1. It may not necessarily be applicable to this product.

NCBI GI #	4557673
NCBI GeneID	3651
NCBI Accession #	NP_000200
UniProt Primary Accession #	P52945
UniProt Secondary Accession #	O60594; Q5VYW2
UniProt Related Accession #	P52945
GenBank Nucleotide #	NM_000209.3
NCBI Official Full Name	pancreas/duodenum homeobox protein 1
NCBI Official Synonym Full Names	pancreatic and duodenal homeobox 1
NCBI Official Symbol	PDX1
NCBI Official Synonym Symbols	GSF; IPF1; IUF1; IDX-1; MODY4; PDX-1; STF-1; PAGEN1
UniProt Protein Name	Pancreas/duodenum homeobox protein 1
UniProt Synonym Protein Names	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
Protein Family	Pancreas/duodenum homeobox protein

UniProt Gene Name	PDX1
UniProt Synonym Gene Names	IPF1; STF1; PDX-1; GSF; IPF-1; IUF-1; IDX-1; STF-1
UniProt Entry Name	PDX1_HUMAN
NCBI Protein Information	pancreas/duodenum homeobox protein 1
NCBI Summary for PDX1	The protein encoded by this gene is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. The encoded nuclear protein is involved in the early development of the pancreas and plays a major role in glucose-dependent regulation of insulin gene expression. Defects in this 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). [provided by RefSeq, Jul 2008]
UniProt Comments for PDX1	PDX1: 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. Interacts with the basic helix-loop-helix domains of TCF3(E47) and NEUROD1 and with HMG-I(Y). Interacts with SPOP. Interacts with the methyltransferase SETD7. Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells). Belongs to the Antp homeobox family. IPF1/XlHbox-8 subfamily. Protein type: DNA-binding; Transcription factor Chromosomal Location of Human Ortholog: 13q12.1 Cellular Component: nucleus; cytosol Molecular Function: RNA polymerase II transcription factor activity, enhancer binding; protein heterodimerization activity; protein complex binding; chromatin binding; transcription factor binding; transcription factor activity Biological Process: transcription from RNA polymerase II promoter; response to nicotine; central nervous system development; response to glucocorticoid stimulus; exocrine pancreas development; negative regulation of transcription from RNA polymerase II promoter; glucose homeostasis; response to chlorate; response to vitamin; negative regulation of cell proliferation; detection of glucose; morphogenesis of embryonic epithelium; positive regulation of cell proliferation; response to wounding; response to iron(II) ion; positive regulation of DNA binding; response to drug; organ regeneration; smoothened signaling pathway; generation of precursor metabolites and energy; organ senescence; positive regulation of insulin secretion; glucose metabolic process; stem cell differentiation; liver development; endocrine pancreas development; organ morphogenesis; response to leucine; gut development; insulin secretion; response to cytokine stimulus; positive regulation of transcription from RNA polymerase II promoter; nitric oxide mediated signal transduction Disease: Maturity-onset Diabetes Of The Young, Type 4; Diabetes Mellitus, Permanent Neonatal; Pancreatic Agenesis 1; Diabetes Mellitus, Noninsulin-dependent
Research Articles on PDX1	**1.** CONCLUSIONS: Our results demonstrate the use of in vitro-synthesized PDX1 messenger RNA to differentiate hUC-MSCs into islet-like cells and pave the way toward the development of reprogramming and directed-differentiation methods
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/pdx1/6332543