

ARG43792
anti-PDX1 antibodyPackage: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PDX1
Tested Reactivity	Hu
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PDX1
Species	Human
Immunogen	Recombinant protein corresponding to Human PDX1.
Conjugation	Un-conjugated
Alternate Names	IPF1; Glucose-sensitive factor; Somatostatin-transactivating factor 1; Pancreas/duodenum homeobox protein 1; GSF; Insulin upstream factor 1; IUF-1; IUF1; IDX-1; Insulin promoter factor 1; MODY4; PDX-1; PAGEN1; IPF-1; STF-1; Islet/duodenum homeobox-1

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg / 1x10 ⁶ cells
	WB	0.25 - 1 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse pancreas	
Observed Size	~ 40 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.01% Sodium azide and 4% Trehalose.
Preservative	0.01% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

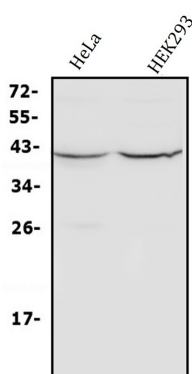
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

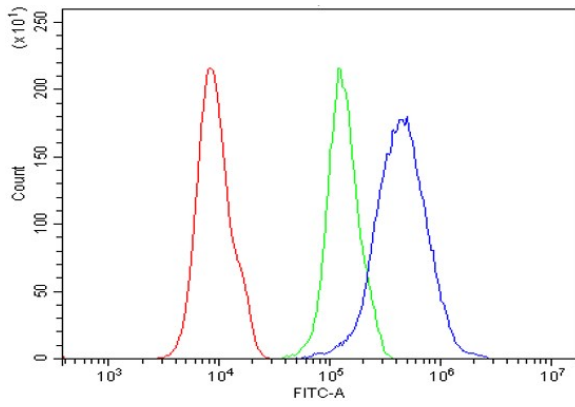
Gene Symbol	PDX1
Gene Full Name	pancreatic and duodenal homeobox 1
Background	The protein encoded by this gene is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. The encoded nuclear protein is involved 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]
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. As part of a PDX1:PBX1b:MEIS2b complex in pancreatic acinar cells is involved in the transcriptional activation of the ELA1 enhancer; the complex binds to the enhancer B element and cooperates with the transcription factor 1 complex (PTF1) bound to the enhancer A element. 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. [UniProt]
Calculated Mw	31 kDa
PTM	Phosphorylated by the SAPK2 pathway at high intracellular glucose concentration. Phosphorylated by HIPK2 on Ser-268 upon glucose accumulation. This phosphorylation mediates subnuclear localization shifting. Phosphorylation by PASK may lead to translocation into the cytosol (By similarity). [UniProt]
Cellular Localization	Nucleus. Cytoplasm, cytosol. [UniProt]

Images



ARG43792 anti-PDX1 antibody WB image

Western blot: HeLa and HEK293 cell lysates stained with ARG43792 anti-PDX1 antibody.



ARG43792 anti-PDX1 antibody FACS image

Flow Cytometry: 293T cells were blocked with 10% normal goat serum and then stained with ARG43792 anti-PDX1 antibody (blue) at 1 $\mu\text{g}/10^6$ cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 $\mu\text{g}/10^6$ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.