ARG59970
anti-PDX1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PDX1
Tested Reactivity	Hu, Ms
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PDX1
Species	Human
Immunogen	Synthetic peptide within aa. 1-100 of Human PDX1 (NP_000200.1).
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
WB	1:500 - 1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Mouse liver and HepG2
Observed Size	39 kDa

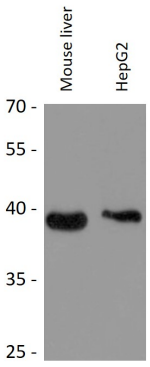
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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. 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



ARG59970 anti-PDX1 antibody WB image

Western blot: 25 µg of Mouse liver and HepG2 cell lysates stained with ARG59970 anti-PDX1 antibody at 1:1000 dilution.