

Anti-PDX-1 antibody



Description	Rabbit polyclonal to PDX-1.
Model	STJ95014
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human PDX-1 around the non-phosphorylation site of S61.
Immunogen Region	40-120 aa
Gene ID	3651
Gene Symbol	PDX1
Dilution range	WB 1:500-1:2000ELISA 1:40000
Specificity	PDX-1 Polyclonal Antibody detects endogenous levels of PDX-1 protein.
Tissue Specificity	Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells).
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Pancreas/duodenum homeobox protein 1 PDX-1 Glucose-sensitive factor GSF Insulin promoter factor 1 IPF-1 Insulin upstream factor 1 IUF-1 Islet/duodenum homeobox-1 IDX-1 Somatostatin-transactivatin

Molecular Weight	42 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6107OMIM:125853
Alternative Names	Pancreas/duodenum homeobox protein 1 PDX-1 Glucose-sensitive factor GSF Insulin promoter factor 1 IPF-1 Insulin upstream factor 1 IUF-1 Islet/duodenum homeobox-1 IDX-1 Somatostatin-transactivatin
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.
Sequence and Domain Family	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).
Cellular Localization	Nucleus. Cytoplasm, cytosol
Post-translational Modifications	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 .