

PDX1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP7740a

Specification

PDX1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession [P52945](#)

PDX1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 3651

Other 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-transactivating factor 1, STF-1, PDX1, IPF1, STF1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7740a](/products/AP7740a) was selected from the N-term region of human PDX1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PDX1 Antibody (N-term) Blocking peptide - Protein Information

Name PDX1

Synonyms IPF1, STF1

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.

Cellular Location

Nucleus. Cytoplasm, cytosol.

Tissue Location

Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells)

PDX1 Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

PDX1 Antibody (N-term) Blocking peptide - Images**PDX1 Antibody (N-term) Blocking peptide - Background**

PDX1 is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. This 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 the gene encoding PDX1 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).

PDX1 Antibody (N-term) Blocking peptide - References

Ma,J., Carcinogenesis 29 (7), 1327-1333 (2008)Watada,H., Biochem. Biophys. Res. Commun. 229 (3), 746-751 (1996)