

PDX1 Blocking Peptide (N-term)Synthetic peptide
Catalog # BP20965b**Specification****PDX1 Blocking Peptide (N-term) - Product Information**Primary Accession [P52945](#)**PDX1 Blocking Peptide (N-term) - 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 is selected from aa 21-35 of HUMAN PDX1

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 Blocking Peptide (N-term) - Protein Information

Name PDX1

Synonyms IPF1, STF1

PDX1 Blocking Peptide (N-term) - Background

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.

PDX1 Blocking Peptide (N-term) - References

Stoffel M., et al. Genomics 28:125-126(1995).
Inoue H., et al. Diabetes 45:789-794(1996).
Hiroshi I., et al. Submitted (JUN-1995) to the EMBL/GenBank/DDBJ databases.
Marshak S., et al. Submitted (AUG-1996) to the EMBL/GenBank/DDBJ databases.
Hara M., et al. Submitted (DEC-1997) to the EMBL/GenBank/DDBJ databases.

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 Blocking Peptide (N-term) -
Protocols**

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

- [Blocking Peptides](#)