

Phospho-IPF(T11) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3617a

Specification

Phospho-IPF(T11) Antibody - Product Information

Application DB,E
Primary Accession P52945

Other Accession P52947, P52946

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
30771

Phospho-IPF(T11) Antibody - 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

This IPF Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T11 of human IPF.

Dilution

DB~~1:500

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-IPF(T11) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-IPF(T11) Antibody - 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

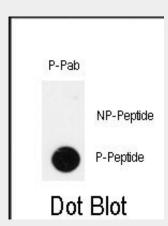
Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells)

Phospho-IPF(T11) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-IPF(T11) Antibody - Images



Dot blot analysis of anti-Phospho-IPF-pT11 Antibody (Cat.#AP3617a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-IPF(T11) Antibody - Background

PDX1 is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. The protein is involved in the early





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development of the pancreas and plays a major role in glucose-dependent regulation of insulin gene expression. Defects in its 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).

Phospho-IPF(T11) Antibody - References

Lebrun P, Montminy MR, Van Obberghen E (2005) J Biol Chem 280, 38203-10