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(Mouse) Pdx1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21086a

Product Information

Application	WB, IF, E
Primary Accession	P52946
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51197
Calculated MW	30999

Additional Information

Gene ID	18609
Other Names	Pancreas/duodenum homeobox protein 1, Insulin promoter factor 1, IPF-1, Islet/duodenum homeobox 1, IDX-1, Somatostatin-transactivating factor 1, STF-1, Pdx1, Ipf1
Target/Specificity	This Mouse Pdx1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 136-169 amino acids from the Central region of Mouse Pdx1.
Dilution	WB~~1:1000 IF~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	(Mouse) Pdx1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Pdx1
Synonyms	Ipf1
Function	Activates insulin and somatostatin gene transcription. Key regulator of islet peptide hormone expression but also responsible for the development of the

	pancreas, most probably by determining maturation and differentiation of common pancreatic precursor cells in the developing gut. 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 the DNA sequence 5'-CC[CT]TAATGGG-3'.
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108, ECO:0000269|PubMed:17052199}. 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)

Background

Activates insulin and somatostatin gene transcription. Key regulator of islet peptide hormone expression but also responsible for the development of the pancreas, most probably by determining maturation and differentiation of common pancreatic precursor cells in the developing gut. 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 the DNA sequence 5'-CC[CT]TAATGGG-3'.

References

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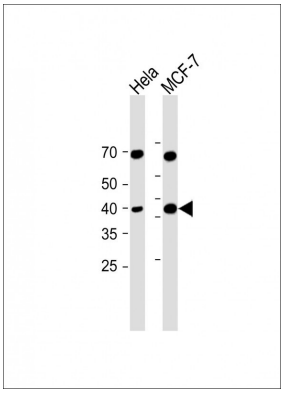
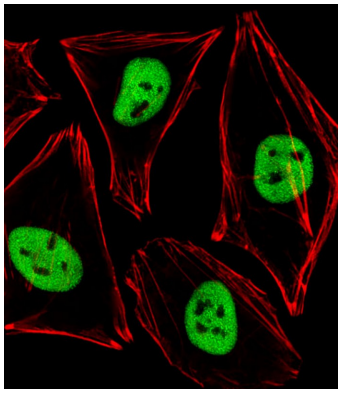
Liu Y.,et al.J. Biol. Chem. 276:17985-17993(2001).
Liu A.,et al.Mol. Cell. Biol. 24:4372-4383(2004).

Images



All lanes: Anti-(Mouse) Pdx1 Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 37 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized Hela (Human Cervical epithelial adenocarcinoma cell line) cells labeling Pdx1 with AP21086a at 1/25 dilution, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/400 dilution (green). Confocal image showing nuclear staining on Hela cell line. Cytoplasmic actin is detected with Alexa Fluor® 555 conjugated with



Phalloidin (OB16636430) at 1/100 dilution (red).