PDX1 (Phospho Ser61) Rabbit pAb

CatalogNo: YP1788 **Orthogonal Validated**

Key Features

Host Species	Reactivity	Applications
• Rabbit	• Human,Mouse,Rat	• WB

MW	Isotype
• 31kD (Calculated)	• IgG

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-2000

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	Synthesized peptide derived from human PDX1 (Phospho-Ser61)
Specificity	This antibody detects endogenous levels of PDX1 (Phospho-Ser61) at Human, Mouse,Rat.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):QGsPP

Target Information

Gene name PDX1 IPF1

Protein Name PDX1 (Phospho-Ser61)

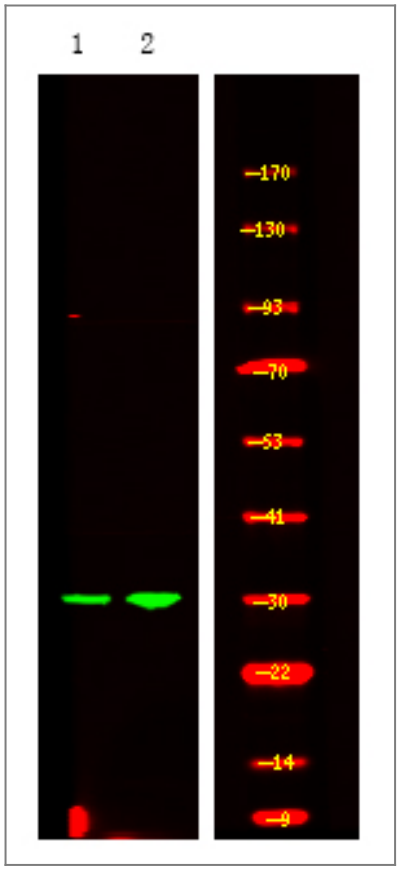
Organism	Gene ID	UniProt ID
Human	3651;	P52945;
Mouse	18609;	P52946;
Rat	29535;	P52947;

Cellular Localization Nucleus. Cytoplasm, cytosol .

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

Function Disease:Defects in PDX1 are a cause of pancreatic agenesis [MIM:260370]. This autosomal recessive disorder is characterized by absence or hypoplasia of pancreas, leading to early-onset insulin-dependent diabetes mellitus. This was found in a frameshift mutation that produces a truncated protein and results in a second initiation that produces a second protein that act as a dominant negative mutant.,Disease:Defects in PDX1 are the cause of maturity onset diabetes noninsulin-dependent diabetes mellitus (NIDDM) [MIM:125853]; also known as diabetes mellitus type II.,Disease:Defects in PDX1 are the cause of maturity onset diabetes of the young type 4 (MODY4) [MIM:606392]; also symbolized MODY-4. MODY [MIM:606391] is a form of diabetes mellitus characterized by an autosomal dominant mode of inheritance, age of onset of 25 years or younger and a primary defect in insulin secretion.,Domain:The Antp-type hexapeptide mediates heterodimerization with PBX on a regulatory element of the somatostatin promoter.,Domain: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).,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. 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.,miscellaneous:According to PubMed:16141209, it may be methylated by SETD7 in vitro. However, the relevance of methylation is unsure in vivo.,PTM:Phosphorylated by the SAPK2 pathway at high intracellular glucose concentration.,similarity:Belongs to the Antp homeobox family. IPF1/XlHbox-8 subfamily.,similarity:Contains 1 homeobox DNA-binding domain.,subunit:Interacts with the basic helix-loop-helix domains of TCF3(E47) and NEUROD1 and with HMG-I(Y). Interacts with SPOP (By similarity). Interacts with the methyltransferase SETD7.,tissue specificity:Duodenum and pancreas (Langerhans islet beta cells and small subsets of endocrine non-beta-cells, at low levels in acinar cells).,

Validation Data



Western Blot analysis of Hela cell,2, LPS 100ng/mL 30min treated ,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000

Contact information

Orders:	order.cn@immunoway.com
Support:	support.cn@immunoway.com
Telephone:	400-8787-807(China)
Website:	http://www.immunoway.com.cn
Address:	2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information: **PDX1 (Phospho Ser61) Rabbit pAb**