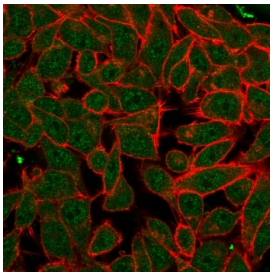
PDX1 Antibody PCRP-PDX1-2C11 / Insulin Promoter Factor 1 Antibody [clone PCRP-PDX1-2C11] (V9260)

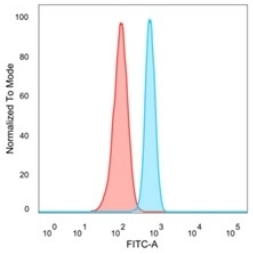
Catalog No.	Formulation	Size
V9260-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9260-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9260SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

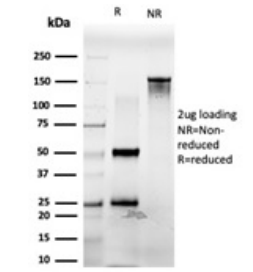
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c
Clone Name	PCRP-PDX1-2C11
Purity	Protein A/G affinity
UniProt	P52945
Localization	Nucleus
Applications	Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-2ug/ml
Limitations	This PDX1 Antibody PCRP-PDX1-2C11 / Insulin Promoter Factor 1 Antibody is available for research use only.



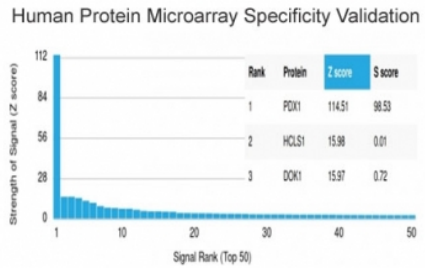
PDX1 Antibody PCRP-PDX1-2C11 Detection in HEK293T Cells by IF. Immunofluorescence staining of PDX1-transfected human HEK293T cells using PDX1 Antibody (clone PCRP-PDX1-2C11) shows strong green fluorescence concentrated predominantly within the nuclei of expressing cells, while nuclei are counterstained blue with DAPI. The nuclear localization is consistent with the role of PDX1 as a homeodomain transcription factor. The distinct signal demonstrates detection of recombinant PDX1 in transfected cells using this Insulin Promoter Factor 1 Antibody.



PDX1 Antibody PCRP-PDX1-2C11 Detection in HEK293T Cells by FACS. Flow cytometry analysis of PDX1-transfected human HEK293T cells using PDX1 Antibody (clone PCRP-PDX1-2C11) shows a clear fluorescence shift in the antibody-stained population relative to the control population. The separation between the distributions demonstrates detection of intracellular PDX1 in transfected cells and supports recognition of the transcription factor using this Insulin Promoter Factor 1 Antibody.



PDX1 Antibody PCRP-PDX1-2C11 Purity and Integrity by SDS-PAGE. SDS-PAGE analysis of purified PDX1 Antibody (clone PCRP-PDX1-2C11) shows the expected immunoglobulin migration pattern, with an intact antibody band near 150 kDa under non-reducing conditions and heavy and light chains near 50 kDa and 25 kDa under reducing conditions. The expected non-reduced and reduced migration patterns support the integrity and purity of this Insulin Promoter Factor 1 Antibody preparation.



PDX1 Antibody PCRP-PDX1-2C11 Protein Microarray Validated. Protein microarray analysis of PDX1 Antibody (clone PCRP-PDX1-2C11) on a HuProt array shows PDX1 as the dominant reactive protein, with clear separation from the remaining proteins represented on the array. The Z-score reflects the number of standard deviations a signal lies above the array mean, while the S-score reflects separation of the target signal from the next-ranked protein. The prominent PDX1 signal supports target recognition by this Protein Microarray Validated Insulin Promoter Factor 1 Antibody.

Description

PDX1 Antibody PCRP-PDX1-2C11 recognizes pancreatic and duodenal homeobox 1 (PDX1), a homeodomain transcription factor with essential roles in pancreatic development, beta-cell differentiation, and regulation of insulin expression. PDX1 is also known as insulin promoter factor 1 (IPF1) and functions as a transcriptional regulator of genes involved in pancreatic endocrine identity and glucose-responsive hormone production. Its activity is particularly important for establishing and maintaining the differentiated state of insulin-producing pancreatic beta cells.

During embryonic development, PDX1 is expressed in pancreatic progenitor cells that contribute to endocrine, exocrine, and ductal lineages. Subsequent changes in PDX1 expression help coordinate pancreatic differentiation, while persistent expression in mature beta cells supports insulin production and normal glucose homeostasis. PDX1 binds regulatory elements within the insulin gene and cooperates with additional transcription factors to control beta-cell-specific gene expression. Its nuclear localization is consistent with its direct role in transcriptional regulation.

PDX1 is extensively studied in diabetes, pancreatic development, beta-cell regeneration, and cellular reprogramming. Reduced or disrupted PDX1 activity can impair beta-cell function and insulin production, while pathogenic variants in PDX1 are associated with forms of monogenic diabetes and pancreatic developmental abnormalities. PDX1 is also investigated in pancreatic cancer and neuroendocrine biology, where changes in lineage-associated transcriptional programs can provide insight into cellular differentiation and disease progression.

Clone PCRP-PDX1-2C11 is a mouse monoclonal antibody generated against recombinant human PDX1 protein. This Insulin Promoter Factor 1 Antibody provides a defined monoclonal reagent for investigating PDX1 expression and complements antibodies targeting other regulators of pancreatic endocrine and beta-cell biology. NSJ Bioreagents supplies clone PCRP-PDX1-2C11 for research use only.

A PDX1 Antibody can be used to investigate pancreatic development, beta-cell identity and differentiation, insulin gene regulation, glucose homeostasis, diabetes biology, and pancreatic disease.

Explore our Beta Cell Marker Antibodies page for additional antibodies targeting proteins involved in pancreatic beta-cell identity, differentiation, function, and insulin regulation.

Application Notes

Optimal dilution of the PDX1 Antibody PCRP-PDX1-2C11 / Insulin Promoter Factor 1 Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human PDX1 protein was used as the immunogen for the PDX1 Antibody PCRP-PDX1-2C11.

Storage

Aliquot the PDX1 Antibody PCRP-PDX1-2C11 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

IPF1 antibody, insulin promoter factor 1 antibody, pancreatic and duodenal homeobox 1 antibody, pancreatic-duodenal homeobox 1 antibody, STF-1 antibody, IUF1 antibody, GSF antibody

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