

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PDX-1/IPF1 in direct ELISAs and Western blots. In direct ELISAs, approximately 45% cross-reactivity with recombinant mouse PDX-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PDX-1/IPF1 Ala91-Arg283 Accession # P52945
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

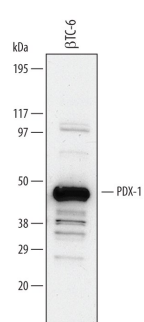
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	10 µg/mL	See Below

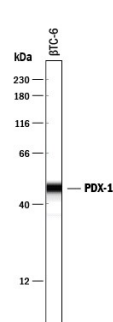
DATA

Western Blot



Detection of Human PDX-1/IPF1 by Western Blot. Western blot shows lysates of β TC-6 mouse beta cell insulinoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human PDX-1/IPF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2419) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for PDX-1/IPF1 at approximately 45 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

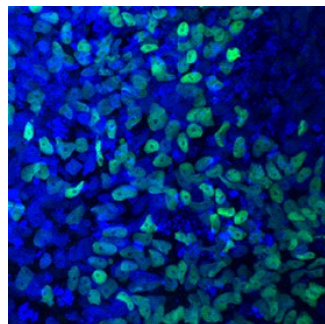
Simple Western



Detection of Mouse PDX-1/IPF1 by Simple Western™. Simple Western lane view shows lysates of β TC-6 mouse beta cell insulinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for PDX-1/IPF1 at approximately 48 kDa (as indicated) using 10 µg/mL of Goat Anti-Human PDX-1/IPF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2419) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

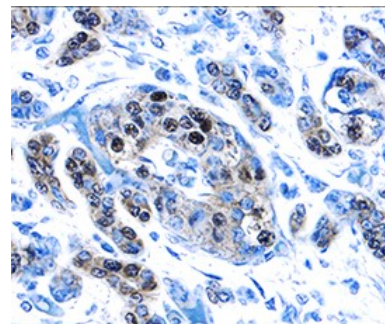


Immunocytochemistry



PDX-1/IPF1 in BG01V Human Embryonic Stem Cells. PDX-1/IPF1 was detected in immersion fixed BG01V human embryonic stem cells differentiated into pancreatic progenitor cells using Goat Anti-Human PDX-1/IPF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2419) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Goat IgG Secondary Antibody (green; Catalog # NL003) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

Immunohistochemistry



PDX-1/IPF1 in Human Pancreatic Cancer Tissue. PDX-1/IPF1 was detected in immersion fixed paraffin-embedded sections of human pancreatic cancer tissue using Goat Anti-Human PDX-1/IPF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2419) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei in cancer cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

PDX-1, also known as islet/duodenum homeobox-1 (IDX-1), is a homeodomain-containing transcription factor. During embryonic development, PDX-1 is required for pancreas differentiation in adult islet cells. PDX-1 regulates β -cell specific gene expression and function. Human and mouse PDX-1 share 88% amino acid sequence homology.