## SANTA CRUZ BIOTECHNOLOGY, INC.

# PTF1 (H-83): sc-98612



### BACKGROUND

PTF1, also known as PTF1A (pancreas specific transcription factor, 1A) or PTF1-p48, is a pancreas-specific protein that functions as a component of the trimeric pancreas transcription factor 1 (PTF1) complex. Localizing to the nucleus, PTF1 contains one basic helix-loop-helix (bHLH) domain and is believed to play an important role in mammalian pancreatic development, functioning as a transcription factor that regulates the specification of all three pancreatic cell types. PTF1 interacts with RBP-J $\kappa$  and, together, they cooperate in regulating the expression of PDX-1 (pancreas/duodenum home-obox protein 1), a key regulator of pancreatic islet development and Insulin gene transcription in  $\beta$  cells. Loss of functional PTF1 can cause pancreatic progenitors to take on the normal fates of duodenal epithelia. Mutations in the gene encoding PTF1 lead to diabetes mellitus and cerebellar hypopla-sia/agenesis, suggesting that PTF1 also plays and important role in cerebellar neurogenesis.

## CHROMOSOMAL LOCATION

Genetic locus: PTF1A (human) mapping to 10p12.2; Ptf1a (mouse) mapping to 2 A3.

#### SOURCE

PTF1 (H-83) is a rabbit polyclonal antibody raised against amino acids 246-328 mapping at the N-terminus of PTF1 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98612 X, 200  $\mu g/0.1$  ml.

## **APPLICATIONS**

PTF1 (H-83) is recommended for detection of PTF1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PTF1 (H-83) is also recommended for detection of PTF1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for PTF1 siRNA (h): sc-76285, PTF1 siRNA (m): sc-76286, PTF1 shRNA Plasmid (h): sc-76285-SH, PTF1 siRNA (m): sc-76286-SH, and PTF1 shRNA (h) Lentiviral Particles: sc-76285-V and PTF1 shRNA (h) Lentiviral Particles: sc-76286-V.

PTF1 (H-83) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

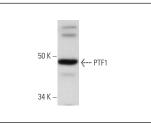
Molecular Weight of PTF1: 42 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### DATA



PTF1 (H-83): sc-98612. Western blot analysis of PTF1 expression in MIA PaCa-2 whole cell lysate.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try PTF1 (C-7): sc-393011 or PTF1 (A-3): sc-393148, our highly recommended monoclonal alternatives to

PTF1 (H-83).