abcam

Product datasheet

Anti-PTF1A antibody [EPR19011] ab182398

Recombinant RabMAb

★★★☆ 1 Abreviews 5 Images

Overview

Product name Anti-PTF1A antibody [EPR19011]

Description Rabbit monoclonal [EPR19011] to PTF1A

Host species Rabbit

Tested applications Suitable for: IP. WB

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Human fetal heart and fetal kidney lysates; BxPC-3, C6, RAW 264.7, PC-12 and NIH/3T3

whole cell lysates; Rat heart and pancreas lysates; Mouse pancreas lysate. IP: NIH/3T3 whole cell

lysate.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR19011

Isotype IgG

Applications

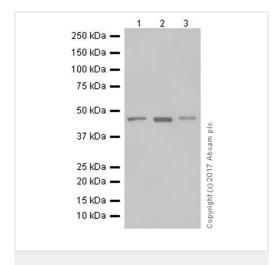
The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab182398 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		1/50.
WB		1/2000. Detects a band of approximately 42 kDa (predicted molecular weight: 35 kDa).

Target		
Function	Transcriptional activator. Binds to the E-box consensus sequence 5'-CANNTG-3'. Plays an important role in determining whether cells allocated to the pancreatic buds continue towards pancreatic organogenesis or revert back to duodenal fates. May be involved in the maintenance of exocrine pancreas-specific gene expression including ELA1 and amylase. Required for the formation of pancreatic acinar and ductal cells (By similarity). Plays an important role in cerebellar development.	
Tissue specificity	Pancreas-specific (at protein level). Loss of expression is seen in ductal type pancreas cancers.	
Involvement in disease	Defects in PTF1A are the cause of diabetes mellitus and cerebellar hypoplasia/agenesis (DMCH) [MIM:609069].	
Sequence similarities	Contains 1 basic helix-loop-helix (bHLH) domain.	
Cellular localization	Nucleus. Cytoplasm. In chronic pancreatitis associated with pancreas cancer preferentially accumulates in the cytoplasm of acinar/ductular complexes. In the cytoplasm loses its ability to form the PTF1 complex.	
Form	PTF1A is a pancreas specific transcription factor. Mammalian studies have implicated important roles for the basic helix-loop-helix transcription factor PTF1A-p48 in the development of both exocrine and endocrine pancreas.	
Images		



Western blot - Anti-PTF1A antibody [EPR19011] (ab182398)

All lanes : Anti-PTF1A antibody [EPR19011] (ab182398) at 1/2000 dilution

Lane 1: Human fetal heart tissue lysate

Lane 2: Human fetal kidney tissue lysate

 $\textbf{Lane 3:} \ \mathsf{BxPC-3} \ (\mathsf{Human} \ \mathsf{pancreas} \ \mathsf{adenocarcinoma} \ \mathsf{cell} \ \mathsf{line})$

whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) at 1/10000 dilution

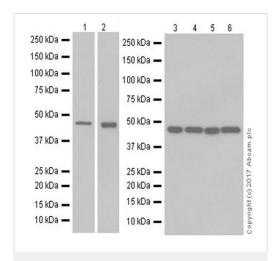
Predicted band size: 35 kDa **Observed band size:** 42 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been

described in the literature (PMID: 18347078).



Western blot - Anti-PTF1A antibody [EPR19011] (ab182398)

All lanes : Anti-PTF1A antibody [EPR19011] (ab182398) at 1/2000 dilution

Lane 1: Rat heart tissue lysate at 20 µg

Lane 2: Rat pancreas tissue lysate at 20 µg

Lane 3 : C6 (Rat glial tumor cell line) whole cell lysate at 10 μg

Lane 4 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate at 10 μg

Lane 5 : PC-12 (Rat adrenal gland pheochromocytoma cell line)

whole cell lysate at 10 µg

Lane 6: NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell

lysate at 10 µg

Secondary

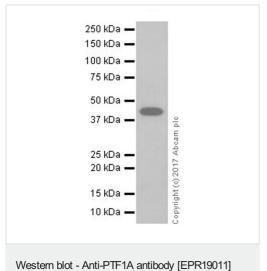
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 35 kDa **Observed band size:** 42 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times: Lane 1: 3 minutes; Lane 2: 30 seconds; Lane 3, 4,

5 and 6: 10 seconds.



Anti-PTF1A antibody [EPR19011] (ab182398) at 1/5000 dilution + Mouse pancreas lysate at 10 μg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

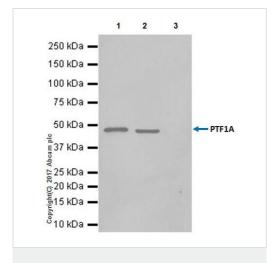
Predicted band size: 35 kDa **Observed band size:** 42 kDa

Exposure time: 3 minutes

Exposure time: 5 minutes

(ab182398)

Blocking/Dilution buffer: 5% NFDM/TBST.



epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab182398 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab182398 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

PTF1A was immunoprecipitated from 1 mg of NIH/3T3 (Human

Lane 1: NIH/3T3 whole cell lysate 10 µg (Input).

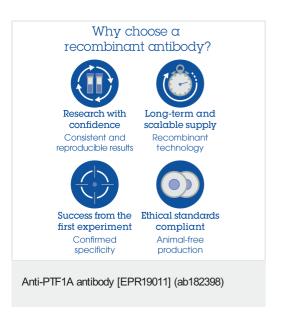
Lane 2: ab182398 IP in NIH/3T3 whole cell lysate.

Lane 3: Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab182398 in NIH/3T3 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds.

Immunoprecipitation - Anti-PTF1A antibody [EPR19011] (ab182398)



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors