

Product datasheet

Anti-PTF1A antibody [EPR19011] - BSA and Azide free  
ab224794

Recombinant RabMAb

5 Images

Overview

<b>Product name</b>	Anti-PTF1A antibody [EPR19011] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR19011] to PTF1A - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant full length protein aa 1 to the C-terminus. Database link: <a href="#">Q9QX98</a>
<b>Positive control</b>	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.
<b>General notes</b>	Ab224794 is the carrier-free version of <a href="#">ab182398</a> . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab224794 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

*Maxpar® is a trademark of Fluidigm Canada Inc.*

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](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

## Properties

---

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR19011
<b>Isotype</b>	IgG

## Applications

---

Our [Abpromise guarantee](#) covers the use of **ab224794** in the following tested applications.

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

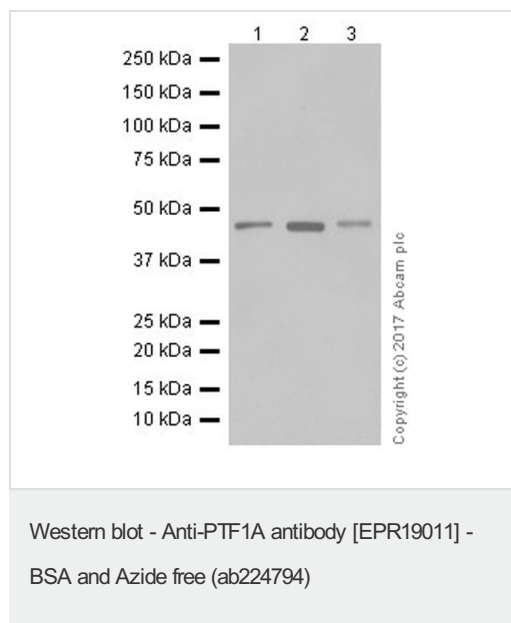
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 42 kDa (predicted molecular weight: 35 kDa).
IP		Use at an assay dependent concentration.

---

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Pancreas-specific (at protein level). Loss of expression is seen in ductal type pancreas cancers.
<b>Involvement in disease</b>	Defects in PTF1A are the cause of diabetes mellitus and cerebellar hypoplasia/agenesis (DMCH) [MIM:609069].
<b>Sequence similarities</b>	Contains 1 basic helix-loop-helix (bHLH) domain.
<b>Cellular localization</b>	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.
<b>Form</b>	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



**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

**Lane 3** : BxPC-3 (Human pancreas adenocarcinoma cells) whole cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes** : VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/10000 dilution

**Predicted band size:** 35 kDa

**Observed band size:** 42 kDa

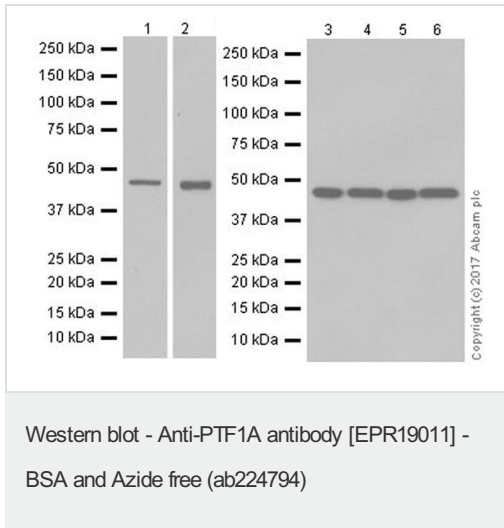
[why is the actual band size different from the predicted?](#)

**Exposure time:** 3 minutes

This data was developed using [ab182398](#), the same antibody clone in a different buffer formulation.

**Blocking and dilution buffer:** 5% NFDm/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 18347078).



**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 IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

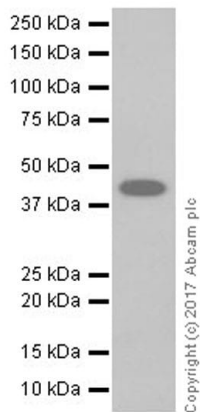
**Predicted band size:** 35 kDa

**Observed band size:** 42 kDa [why is the actual band size different from the predicted?](#)

This data was developed using [ab182398](#), the same antibody clone in a different buffer formulation.

**Blocking and dilution buffer:** 5% NFDm/TBST.

**Exposure times:** Lane 1: 3 minutes; Lane 2: 30 seconds; Lanes 3-6: 10 seconds.



Western blot - Anti-PTF1A antibody [EPR19011] - BSA and Azide free (ab224794)

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

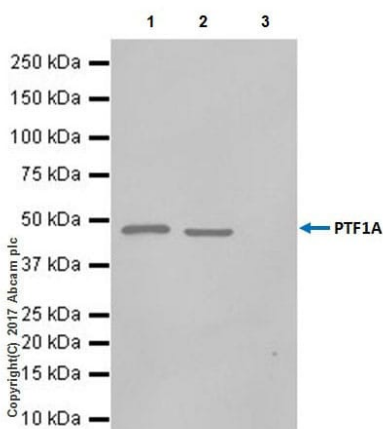
**Predicted band size:** 35 kDa

**Observed band size:** 42 kDa [why is the actual band size different from the predicted?](#)

**Exposure time:** 3 minutes

This data was developed using [ab182398](#), the same antibody clone in a different buffer formulation.

**Blocking and dilution buffer:** 5% NFDm/TBST.



Immunoprecipitation - Anti-PTF1A antibody [EPR19011] - BSA and Azide free (ab224794)

This data was developed using [ab182398](#), the same antibody clone in a different buffer formulation.

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

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

Lane 2: [ab182398](#) IP in NIH/3T3 whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of [ab182398](#) in NIH/3T3 whole cell lysate.

**Blocking and dilution buffer:** 5% NFDm/TBST.

**Exposure time:** 10 seconds.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-PTF1A antibody [EPR19011] - BSA and Azide free (ab224794)

**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