abcam

ab251037

Anti-PWP1 antibody [EPR16130] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR16130
Concentration	1.024 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information PWP1

Function	Chromatin-associated factor that regulates transcription (PubMed:29065309). Regulates Pol I-mediated rRNA biogenesis and, probably, Pol III-mediated transcription (PubMed:29065309). Regulates the epigenetic status of rDNA (PubMed:29065309).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab251037 is the carrier-free version of ab190794.

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

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.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The PWP1 protein also known as Periodic tryptophan protein 1 homolog is a 90 kDa nuclear protein that participates in the assembly of ribosomal subunits. It is predominantly expressed in the nucleolus and is part of the WD40 protein family characterized by repeating units that form a β-propeller structure. This structure facilitates its interaction with various molecular partners allowing it to play a role in ribosome biogenesis.
Biological function summary	PWP1 is involved in the nucleolar function and ribosome production. It acts as part of a multiprotein complex that assists in the maturation of pre-ribosomal particles. The protein contributes to the processing and assembly of ribosomal RNA ensuring proper ribonucleoprotein configuration. This function is especially important in regulating gene expression by controlling protein synthesis at the ribosomal level.
Pathways	PWP1 is a component of the ribosome biogenesis pathway which integrates its activity with other proteins such as NOP58 and RRP9. It is also linked to the RNA processing pathway where it interacts with other nucleolar proteins to ensure accurate RNA transcription and modification. These pathways are essential for maintaining cellular homeostasis and responding to growth signals impacting cell proliferation.

Associated diseases and disorders	PWP1's dysfunction has connections with cancer and disorders relating to ribosomal dysregulation. Aberrant expression or mutation of PWP1 may lead to disruptions in ribosomal biogenesis contributing to oncogenesis. The protein is associated with abnormal regulatory networks alongside proteins like NPM1 which also plays a role in tumorigenesis. Investigations into PWP1 offer insights into potential biomarkers and targets for therapeutic intervention in ribosome-related diseases.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

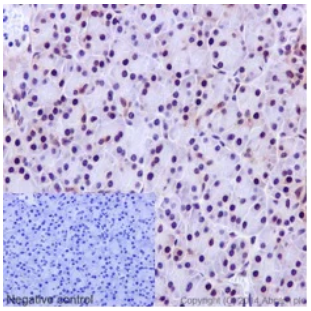
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

4 product images

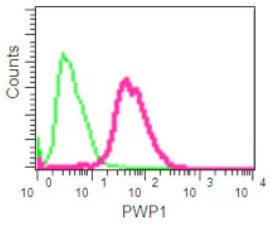


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PWP1 antibody [EPR16130] - BSA and Azide free (ab251037)

PWP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PWP1 antibody

This data was developed using ab190794, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human pancreas tissue, labeling PWP1 with ab190794 at 1/100 dilution. Detected using HRP Polymer for Rabbit IgG and counter-stained using hematoxylin.

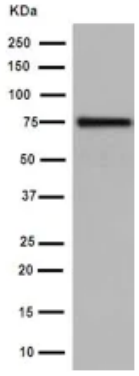
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-PWP1 antibody [EPR16130] - BSA and Azide free (ab251037)

PWP1 Flow Cytometry (Intracellular) staining using rabbit Anti-PWP1 antibody

This data was developed using ab190794, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of PWP1 expression in Jurkat cells using ab190794 at 1/30 dilution (red) and a rabbit IgG as negative control (green). A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody.



Western blot - Anti-PWP1 antibody [EPR16130] - BSA and Azide free (ab251037)

PWP1 Western blot staining of Jurkat cell lysate using rabbit Anti-PWP1 antibody

This data was developed using ab190794, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-PWP1 antibody [EPR16130] (ab190794) at 1/10000 dilution

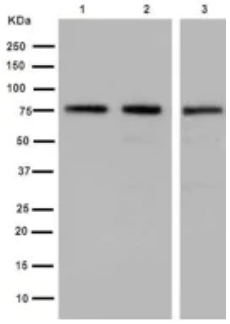
All lanes:
Jurkat cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 79 kDa



Western blot - Anti-PWP1 antibody [EPR16130] - BSA and Azide free (ab251037)

PWP1 Western blot staining using rabbit Anti-PWP1 antibody

This data was developed using ab190794, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-PWP1 antibody [EPR16130] (ab190794) at 1/1000 dilution

Lane 1:
Hela cell lysate at 20 µg

Lane 2:
293 cell lysate at 20 µg

Lane 3:

HepG2 cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.