

Product datasheet

Anti-alpha 1 Fetoprotein antibody [EPAFP61] - BSA and Azide free ab271896

Recombinant RabMAb

6 Images

Overview

Product name	Anti-alpha 1 Fetoprotein antibody [EPAFP61] - BSA and Azide free
Description	Rabbit monoclonal [EPAFP61] to alpha 1 Fetoprotein - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC, IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein corresponding to Human alpha 1 Fetoprotein. Database link: P02771
Positive control	Flow Cyt (intra): HepG2 cells; IP: HepG2 whole cell lysate; ICC: HepG2 cells; IHC-P: Human liver cancer tissue; WB: HepG2 whole cell lysate.
General notes	<p>ab271896 is the carrier-free version of ab133617.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPAFP61
Isotype	IgG

Applications

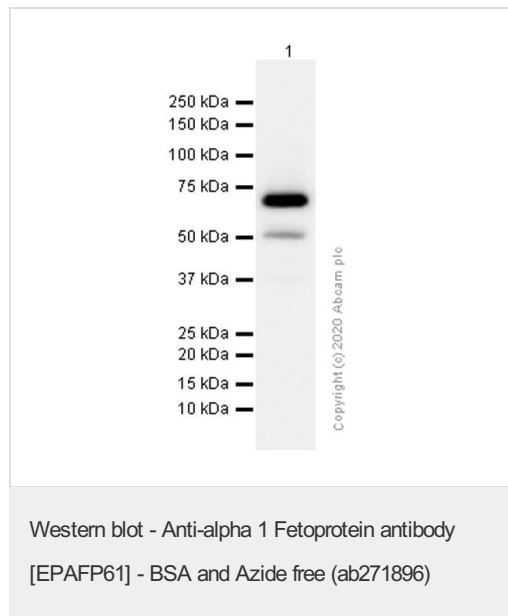
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab271896 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Detects a band of approximately 70 kDa (predicted molecular weight: 68 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols . Heat up to 98°C, below boiling, and then let cool for 10-20 min.
ICC		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

Target

Function	Binds copper, nickel, and fatty acids as well as, and bilirubin less well than, serum albumin. Only a small percentage (less than 2%) of the human AFP shows estrogen-binding properties.
Tissue specificity	Plasma. Synthesized by the fetal liver and yolk sac.
Sequence similarities	Belongs to the ALB/AFP/VDB family. Contains 3 albumin domains.
Developmental stage	Occurs in the plasma of fetuses more than 4 weeks old, reaches the highest levels during the 12th-16th week of gestation, and drops to trace amounts after birth. The serum level in adults is usually less than 40 ng/ml. AFP occurs also at high levels in the plasma and ascitic fluid of adults with hepatoma.
Post-translational modifications	Independent studies suggest heterogeneity of the N-terminal sequence of the mature protein and of the cleavage site of the signal sequence. Sulfated.
Cellular localization	Secreted.

Images



Anti-alpha 1 Fetoprotein antibody [EPAFP61] ([ab133617](#)) at 1/10000 dilution (Purified) + HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate at 15 µg

Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 68 kDa

This data was developed using [ab133617](#), the same antibody clone in a different buffer formulation.



Immunoprecipitation - Anti-alpha 1 Fetoprotein antibody [EPAFP61] - BSA and Azide free (ab271896)

This data was developed using [ab133617](#), the same antibody clone in a different buffer formulation.

Purified [ab133617](#) at 1/20 dilution (0.5µg) immunoprecipitating alpha 1 Fetoprotein in HepG2 whole cell lysate.

Lane 1 (input): HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): [ab133617](#) + HepG2 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of [ab133617](#) in HepG2 whole cell lysate.

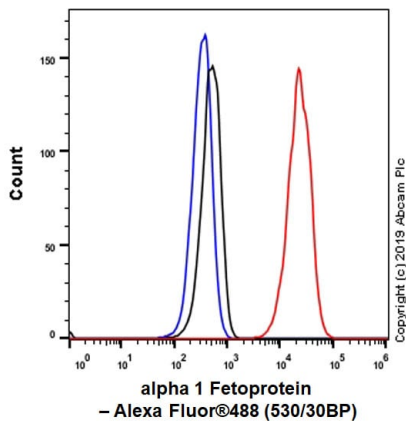
VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 68 kDa

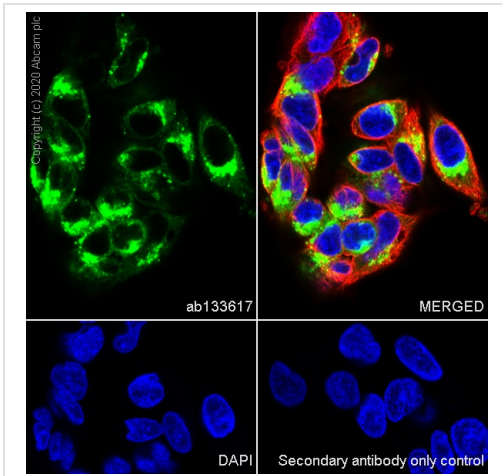
Lower bands could be caspase-dependent cleavage fragments. (PMID: 31811908)



Flow Cytometry (Intracellular) - Anti-alpha 1 Fetoprotein antibody [EPAFP61] - BSA and Azide free (ab271896)

This data was developed using [ab133617](#), the same antibody clone in a different buffer formulation.

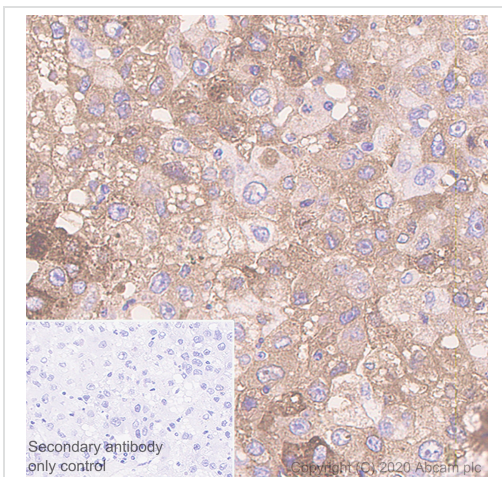
Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling alpha 1 Fetoprotein with Purified [ab133617](#) at 1/20 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry - Anti-alpha 1 Fetoprotein antibody [EPAFP61] - BSA and Azide free (ab271896)

This data was developed using [ab133617](#), the same antibody clone in a different buffer formulation.

Immunocytochemistry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling alpha 1 Fetoprotein with Purified [ab133617](#) at 1/250 dilution (0.52 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 dilution (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1/1000 dilution (2 µg/mL). DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Fetoprotein antibody [EPAFP61] - BSA and Azide free (ab271896)

This data was developed using [ab133617](#), the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver cancer tissue sections labeling alpha 1 Fetoprotein with Purified [ab133617](#) at 1/100 dilution (1.3 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

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

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

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