

Product datasheet

Anti-alpha 1 Fetoprotein antibody [EPAFP61] ab133617

Recombinant RabMAb

[4 References](#) [6 Images](#)

Overview

Product name	Anti-alpha 1 Fetoprotein antibody [EPAFP61]
Description	Rabbit monoclonal [EPAFP61] to alpha 1 Fetoprotein
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, IP, ICC
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>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> <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.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

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 long term. Avoid freeze / thaw cycle.

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPAFP61
Isotype	IgG

Applications

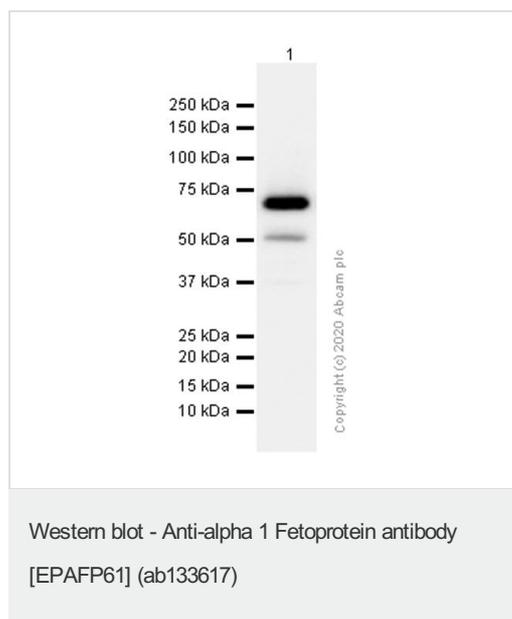
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab133617 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Detects a band of approximately 70 kDa (predicted molecular weight: 68 kDa).
IHC-P		1/100 - 1/250. 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.
IP		1/10 - 1/100.
ICC		1/250.

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

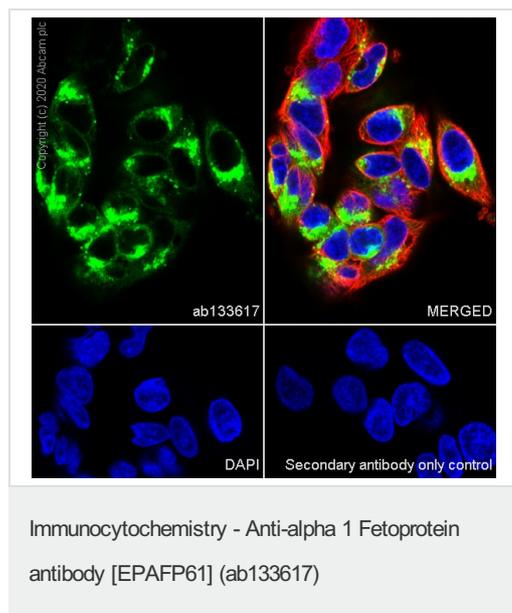


Anti-alpha 1 Fetoprotein antibody [EPAFP61] (ab133617) at 1/10000 dilution (Purified) + HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate at 15 µg

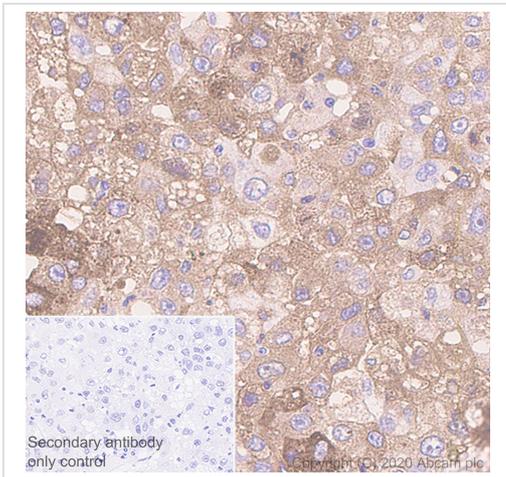
Secondary

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

Predicted band size: 68 kDa

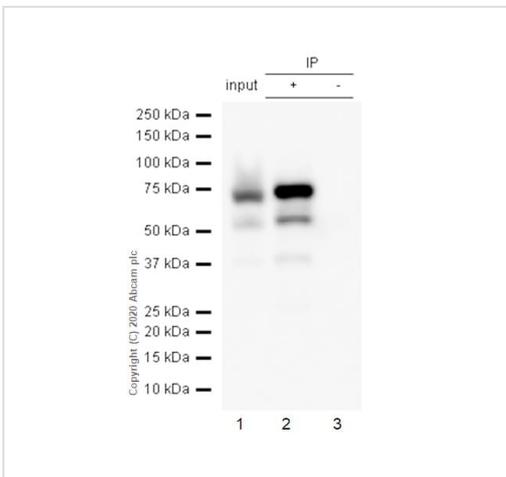


Immunocytochemistry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling alpha 1 Fetoprotein with Purified ab133617 at 1/250 dilution (0.52 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha 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.



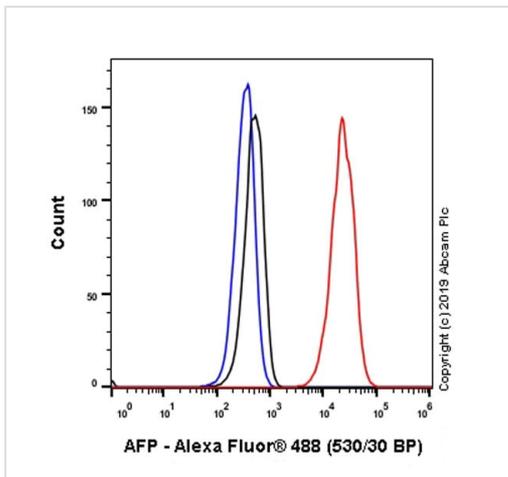
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Fetoprotein antibody [EPAFP61] (ab133617)

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.



Immunoprecipitation - Anti-alpha 1 Fetoprotein antibody [EPAFP61] (ab133617)

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) (1/5000 dilution) was used for Western blotting.
 Blocking Buffer and concentration: 5% NFDm/TBST.
 Diluting buffer and concentration: 5% NFDm/TBST.
 Observed band size: 70 kDa
 Lower bands could be caspase-dependent cleavage fragments. (PMID: 31811908)



Intracellular Flow Cytometry analysis of HepG2 Human hepatocellular carcinoma epithelial cell cells labeling alpha 1 Fetoprotein with purified ab133617 at 1/100 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 - Cells without incubation with primary antibody and secondary antibody (Blue).

Flow Cytometry (Intracellular) - Anti-alpha 1 Fetoprotein antibody [EPAFP61] (ab133617)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-alpha 1 Fetoprotein antibody [EPAFP61] (ab133617)

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