

Product datasheet

Anti-alpha 1 Fetoprotein antibody ab46799

★★★★★ 6 Abreviews 16 References 5 Images

Overview

Product name	Anti-alpha 1 Fetoprotein antibody
Description	Rabbit polyclonal to alpha 1 Fetoprotein
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Mouse, Rat, Cat, Human
Immunogen	A synthetic peptide corresponding to residues in C-terminus of human AFP.
Positive control	HepG2 cell lysate; Human fetal liver tissue

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab46799** 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 a concentration of 1 µg/ml. Detects a band of approximately 73 kDa (predicted molecular weight: 69 kDa).
IHC-P	★★★★★	1/100 - 1/250.

Application notes

Is unsuitable for Flow Cyt, ICC/IF or IP.

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.

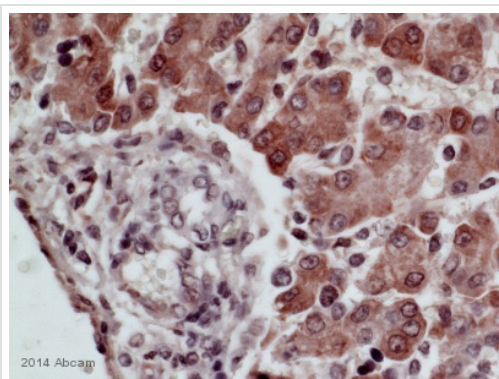
Post-translational modifications

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.

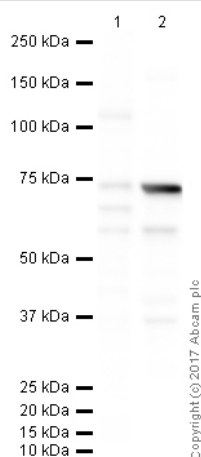
Images



ab46799 staining alpha 1 Fetoprotein in cat liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 2.5% serum for 30 minutes at 25°C; antigen retrieval was by heat mediation in 10mM citrate buffer, pH 6.0. Samples were incubated with primary antibody (1/50 in PBS + 1X casein) for 1 hour at 25°C. An undiluted HRP-conjugated horse anti-rabbit IgG polyclonal was used as the secondary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Fetoprotein antibody (ab46799)

This image is courtesy of an anonymous Abreview



Western blot - Anti-alpha 1 Fetoprotein antibody (ab46799)

All lanes : Anti-alpha 1 Fetoprotein antibody (ab46799) at 1 µg/ml

Lane 1 : HepG2 (Human) Whole Cell Lysate

Lane 2 : Human liver tissue lysate - total protein ([ab29889](#))

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 69 kDa

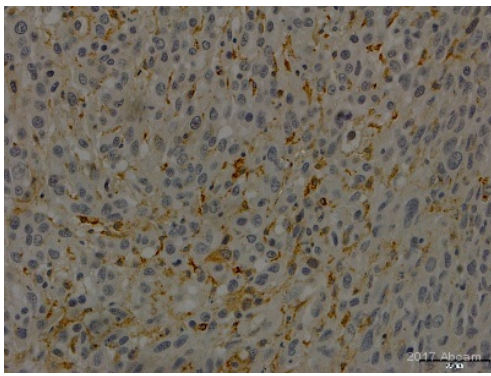
Observed band size: 73 kDa

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

Additional bands at: 58 kDa, 65 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 1 minute

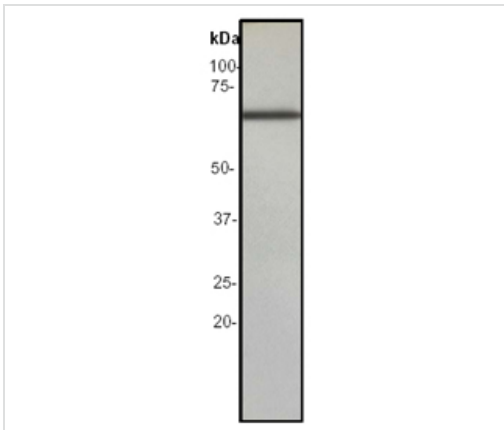
This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab46799 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution [ab133406](#).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Fetoprotein antibody (ab46799)

Image courtesy of an anonymous Abreview

Ab46799 staining alpha 1 Fetoprotein in Mouse tumour tissue sections by Immunohistochemistry (Formalin/PFA-fixed paraffin embedded sections). Tissue samples were fixed by paraformaldehyde, permeabilized with 0.3% triton X-100, blocked with 5% FBS for 1 hour at 22°C and antigen retrieval was by heat mediation in citrate buffer. The sample was incubated with primary antibody (1/100 in antibody diluent) at 4°C for 12 hours. A HRP conjugated goat polyclonal anti-rabbit IgG (1/250) was used as the secondary antibody.



Western blot - Anti-alpha 1 Fetoprotein antibody (ab46799)

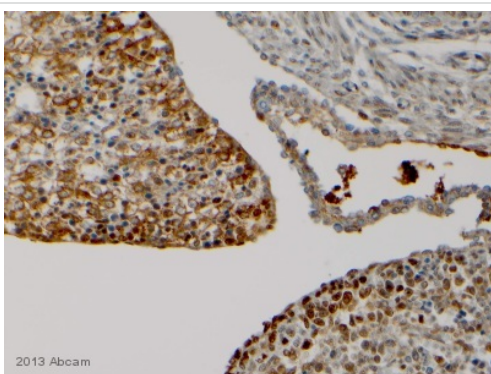
Anti-alpha 1 Fetoprotein antibody (ab46799) at 1/50000 dilution + HepG2 cell lysate at 10 µg

Secondary

Goat anti-rabbit HRP labeled, at 1/2000 dilution

Predicted band size: 69 kDa

Observed band size: 69 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Fetoprotein antibody (ab46799)

This image is courtesy of an anonymous Abreview

ab46799 staining alpha 1 Fetoprotein in Mouse embryonic liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formalin and blocked with 2.5% serum for 20 minutes at 23°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/750 in 1% BSA in TBS) for 1 hour at 23°C. An undiluted HRP-conjugated Horse anti-rabbit polyclonal was used as the secondary antibody.

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