# abcam

### Product datasheet

# Anti-alpha 1 Fetoprotein antibody [RM1011] ab284388

יעלאעבע RabMAb

1 References 画像数 10

製品の概要

製品名 Anti-alpha 1 Fetoprotein antibody [RM1011]

製品の詳細 Rabbit recombinant multiclonal [RM1011] to alpha 1 Fetoprotein

由来種 Rabbit

アプリケーション 適用あり: IHC-P, Indirect ELISA, IP, ICC, Flow Cyt, WB

種交差性 交差種: Mouse, Rat, Human

免疫原 This product was produced with the following immunogens:

Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

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ポジティブ・コントロール WB: HepG2, Huh7, Hepa1-6, Hepa1-6 treated with 300ng/ml BFA for 24h, and Mouse placenta,

> Rat placenta lysates. IHC-P: Human hepatic carcinoma. ICC: HepG2 cells, & Hepa1-6 cells treated with Brefeldin A (300 ng/ml) for 24 h. Flow Cyt: HepG2, & Hepa1-6 cells treated with

300ng/ml BFA for 24h. IP: HepG2 cells.

特記事項 IHC suitable for Human only.

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**.

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ Recombinant Multiclonal

**クローン名** RM1011

アイソタイプ IgG

#### アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab284388の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC suitable for Human only.
Indirect ELISA		Use at an assay dependent concentration.
IP		1/30.
ICC		1/50.
Flow Cyt		1/500.
WB		1/1000. Predicted molecular weight: 68 kDa.

## ターゲット情報

機能 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.

組織特異性 Plasma. Synthesized by the fetal liver and yolk sac.

配列類似性 Belongs to the ALB/AFP/VDB family.

Contains 3 albumin domains.

**発生段階** 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.

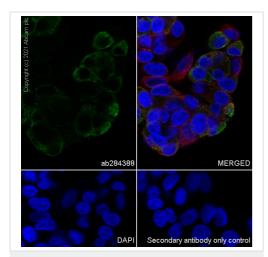
翻訳後修飾 Independent studies suggest heterogeneity of the N-terminal sequence of the mature protein and

of the cleavage site of the signal sequence.

Sulfated.

細胞内局在 Secreted.

#### 画像



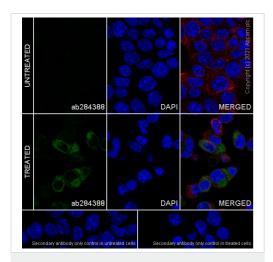
Immunocytochemistry - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388)

This data was developed using ab284388, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HepG2 cells labelling alpha 1 Fetoprotein with ab284388 at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 (2µg/mL) dilution (Green). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5µg/mL dilution (Red). The Nuclear counterstain was DAPI (Blue).

Confocal image showing cytoplasmic staining in HepG2 cells is observed.

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) at 1/1000 (2µg/mL) dilution.

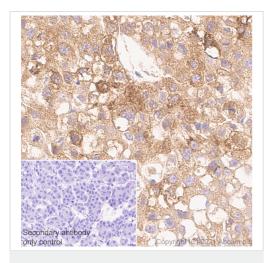


Immunocytochemistry - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Hepa1-6 cells labelling alpha 1 Fetoprotein with ab284388 at 1/50 dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2µg/mL dilution (Green). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5µg/mL) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Confocal image showing increased cytoplasmic staining in Hepa1-6 cells treated with Brefeldin A (300 ng/ml) for 24 h is observed.

Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2µg/mL) dilution.

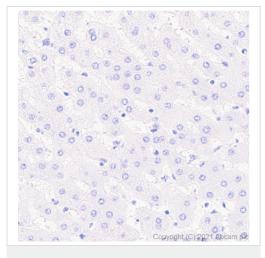


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388)

Immunohistochemical analysis of paraffin-embedded Human hepatic carcinoma tissue labelling alpha 1 Fetoprotein with ab284388 at 1/2000 (0.231 µg/mL) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human hepatic carcinoma. The section was incubated with ab284388 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



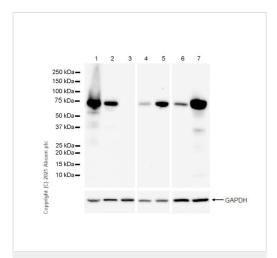
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388)

Negative control: No staining on human liver.

Immunohistochemical analysis of paraffin-embedded Human liver tissue labelling alpha 1 Fetoprotein with ab284388 at 1/2000 (0.231 µg/mL) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with ab284388 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Western blot - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388) **All lanes :** Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388) at 1/1000 dilution

**Lane 1 :** HepG2 (Human hepatocellar carcinoma epithelial cell) whole cell lysate

**Lane 2 :** Huh7 (Human hepatocellar carcinoma epithelial cell) whole cell lysate

**Lane 3 :** MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysate

**Lane 4**: Hepa1-6 (Mouse hepatoma epithelial cell) whole cell lysate

**Lane 5**: Hepa1-6 treated with 300ng/ml BFA for 24h whole cell lysate

Lane 6 : Mouse placenta lysate

Lane 7 : Rat placenta lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

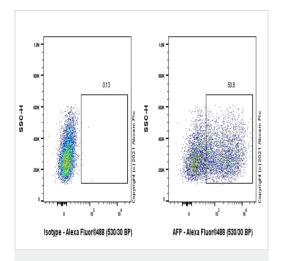
**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 68 kDa Observed band size: 68 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

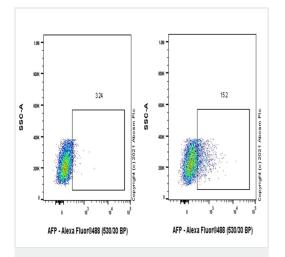
Negative control: MDA-MB-231.

Exposure time: Lane 4-5: 26 seconds; Others: 5 seconds



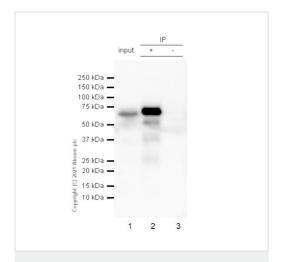
Flow Cytometry - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HepG2 (Human hepatocellular carcinoma epithelial cell) cells labelling alpha 1 Fetoprotein with ab284388 at 1/500 dilution Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388)

Flow cytometric analysis of 4% paraformaldehyde fixed 0.1% Tween-20 permeabilized Hepa1-6 (Mouse hepatoma epithelial cell) treated with 300ng/ml BFA for 24h (Right) / Untreated control (Left) cells labelling alpha 1 Fetoprotein with ab284388 at 1/500 dilution. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, <a href="mailto:ab150081">ab150081</a>) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388)

alpha 1 Fetoprotein was immunoprecipitated from 0.35 mg HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate 10 ug with ab284388 at 1/30 dilution (2 µg in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using ab284388 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

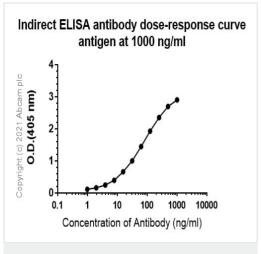
**Lane 1:** HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate 10ug

Lane 2: abab284388 IP in HepG2 whole cell lysate

**Lane 3:** Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab284388 in HepG2 whole cell lysate

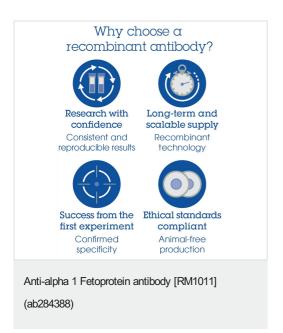
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 seconds



ELISA - Anti-alpha 1 Fetoprotein antibody [RM1011] (ab284388)

ELISA using ab284388 at varying antibody concentrations and antigen concentration at 1000 ng/ml. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit lgG (H+L) (1/2500) was used as the secondary antibody.



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