# abcam

### Product datasheet

# Anti-Fibrinogen alpha chain antibody [EPR2919] ab92572

יעלאעבע RabMAb

★★★★ 1 Abreviews 11 References 画像数 10

#### 製品の概要

製品名 Anti-Fibrinogen alpha chain antibody [EPR2919]

製品の詳細 Rabbit monoclonal [EPR2919] to Fibrinogen alpha chain

由来種 Rabbit

特異性 The immunogen is derived from isoform alpha-E, UniProt accession P02671-1, and the antibody

is not expected to detect isoform alpha.

アプリケーション 適用あり: WB, IP, IHC-P, ICC/IF, Flow Cyt (Intra)

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール IHC: Mouse, rat and human placenta and mouse lung tissue; Flow Cyt (intra): Hepa1-6 cells; WB:

Human, mouse and rat plasma lysates. Rat and mouse platelet lysates. Mouse liver tissue lysate;

IP: Human plasma; ICC/IF: HepG2 cells.

特記事項 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.

Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol, 59% PBS

精製度 Protein A purified

ポリモノ モノクローナル

**クローン名** EPR2919

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab92572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
WB		1/1000 - 1/10000. Predicted molecular weight: 95 kDa.
IP		1/50.
IHC-P	* in in in in (1)	1/3000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Antigen retrieval plus the use of an HRP/AP polymerized secondary antibody is highly recommended for enhanced staining.  For unupurified use at 1/50 - 1/1000
ICC/IF		1/50. For unpurified use at 1/250.
Flow Cyt (Intra)		1/50.

#### ターゲット情報

機能 Fibrinogen has a double function: yielding monomers that polymerize into fibrin and acting as a

cofactor in platelet aggregation.

組織特異性 Plasma.

**関連疾患**Defects in FGA are a cause of congenital afibrinogenemia (CAFBN) [MIM:202400]. This is a rare autosomal recessive disorder characterized by bleeding that varies from mild to severe and by

complete absence or extremely low levels of plasma and platelet fibrinogen. Note=The majority of cases of afibrinogenemia are due to truncating mutations. Variations in position Arg-35 (the site

of cleavage of fibrinopeptide a by thrombin) leads to alpha-dysfibrinogenemias.

Defects in FGA are a cause of amyloidosis type 8 (AMYL8) [MIM:105200]; also known as systemic non-neuropathic amyloidosis or Ostertag-type amyloidosis. AMYL8 is a hereditary generalized amyloidosis due to deposition of apolipoprotein A1, fibrinogen and lysozyme amyloids. Viscera are particularly affected. There is no involvement of the nervous system. Clinical features include renal amyloidosis resulting in nephrotic syndrome, arterial hypertension,

hepatosplenomegaly, cholestasis, petechial skin rash.

配列類似性 Contains 1 fibrinogen C-terminal domain.

A long coiled coil structure formed by 3 polypeptide chains connects the central nodule to the C-

terminal domains (distal nodules). The long C-terminal ends of the alpha chains fold back,

contributing a fourth strand to the coiled coil structure.

翻訳後修飾 The alpha chain is not glycosylated.

Forms F13A-mediated cross-links between a glutamine and the epsilon-amino group of a lysine

residue, forming fibronectin-fibrinogen heteropolymers.

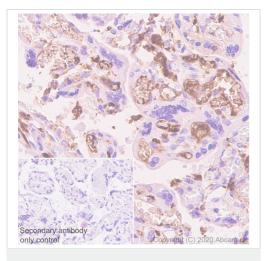
About one-third of the alpha chains in the molecules in blood were found to be phosphorylated. Conversion of fibrinogen to fibrin is triggered by thrombin, which cleaves fibrinopeptides A and B from alpha and beta chains, and thus exposes the N-terminal polymerization sites responsible for the formation of the soft clot. The soft clot is converted into the hard clot by factor XIIIA which catalyzes the epsilon-(gamma-glutamyl)lysine cross-linking between gamma chains (stronger) and between alpha chains (weaker) of different monomers.

Phosphorylation sites are present in the extracelllular medium.

#### 細胞内局在

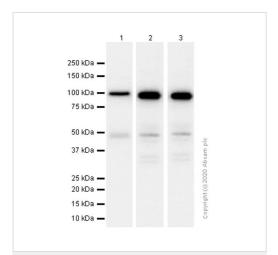
Secreted.

#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human placenta tissue sections labeling Fibrinogen alpha chain with purified ab92572 at 1/3000 dilution (0.053 µg/mL). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572) **All lanes :** Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572) at 1/10000 dilution (purified)

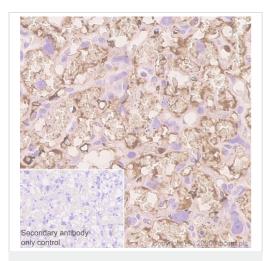
Lane 1 : Human plasma lysate
Lane 2 : Rat platelet lysate
Lane 3 : Rat plasma lysate

Lysates/proteins at 15 µg per lane.

#### Secondary

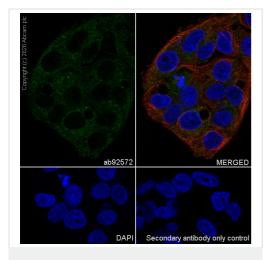
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 95 kDa **Observed band size:** 95 kDa



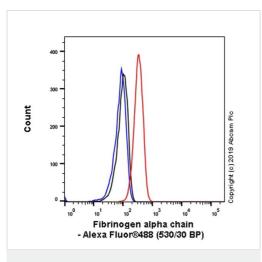
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat placenta tissue sections labeling Fibrinogen alpha chain with purified ab92572 at 1/3000 dilution (0.053 µg/mL). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

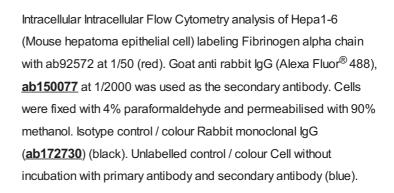


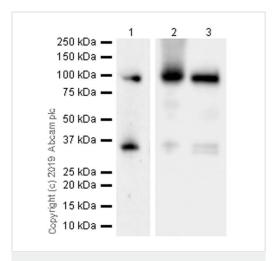
Immunocytochemistry/ Immunofluorescence - Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572)

Immunocytochemistry/ Immunofluorescence analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Fibrinogen alpha chain with purified ab92572 at 1/50 dilution (3.16  $\mu$ g/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<sup>®</sup> 594) 1/200 (2.5  $\mu$ g/mL). Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, <u>ab150077</u>) was used as the secondary antibody at 1/1000 (2  $\mu$ g/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572)





Western blot - Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572)

**All lanes :** Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572) at 1/1000 dilution

Lane 1 : Mouse liver cell lysate

Lane 2 : Mouse plasma cell lysate

Lane 3 : Mouse platelet cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

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

**Predicted band size:** 95 kDa **Observed band size:** 87 kDa

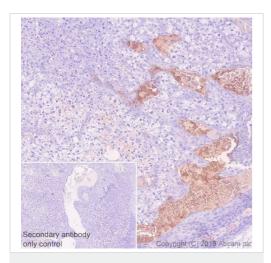
The band around 35 kD represents FGA fragment (PMID: 24937656).

Exposure time:

Lane 1: 3 minutes;

Lanes 2-3: 5.5 seconds

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

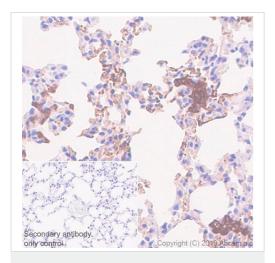


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572)

Immunohistochemical analysis of paraffinembedded mouse placenta using ab92572 at 1/1000 dilution (0.5 µg/ml). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins. A rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as a secondary antibody (ready to use). Negative control used only the secondary antibody. Counterstained with haematoxylin.

Positive staining in plasma of mouse placenta.

The section was incubated with ab92572 for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

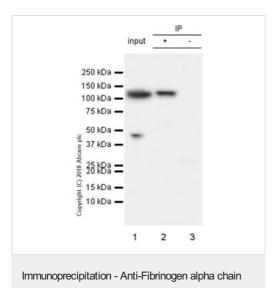


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Fibrinogen alpha chain antibody [EPR2919] (ab92572)

Immunohistochemical analysis of paraffinembedded mouse lung using ab92572 at 1/1000 dilution (0.5 µg/ml). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins, a rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as a secondary antibody (ready to use). Negative control used only the secondary antibody. Counterstained with haematoxylin.

Strong positive staining in plasma of mouse lung (PMID: 26259584).

The section was incubated with ab92572 for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



antibody [EPR2919] (ab92572)

ab92572 at a dilution of 1/100 immunoprecipitating Fibrinogen alpha chain in human plasma.

Lane 1 (input): Human plasma (10 µg)

Lane 2 (+): ab92572 + human plasma.

**Lane 3 (-):** Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab92572 in human plasma.

For western blotting, ab92572 was used as the primary antibody at a 1/1000 dilution and VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

Blocking and dilution buffer: 5% NFDM/TBST.



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