abcam

Product datasheet

Anti-FBP1 antibody [EPR4620] ab109732

Recombinant RabMAb

★★★★★ 1 Abreviews 14 References 8 Images

Overview

Product name	Anti-FBP1 antibody [EPR4620]
Description	Rabbit monoclonal [EPR4620] to FBP1
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), ICC/IF, WB **Unsuitable for:** IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human stomach, Human fetal liver, Human kidney, Mouse liver, Mouse kidney, Rat liver, and MCF7 lysates and DDDK-tagged FBP1 human full-length recombinant protein. ICC/IF: HeLa cell line Flow Cyt (intra): MCF7 cells.
General notes	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**.

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: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4620

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109732 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)		1/400.
ICC/IF		Use a concentration of 10 µg/ml.
WB	★★★★★ (1)	1/1000 - 1/10000. Detects a band of approximately 36 kDa (predicted molecular weight: 37 kDa).

Application notes Is unsuitable for IHC-P.

Target

Pathway Carbohydrate biosynthesis; gluconeogenesis.

Involvement in disease Defects in FBP1 are the cause of fructose-1,6-bisphosphatase deficiency (FBPD) [MIM:229700]. FBPD is inherited as an autosomal recessive disorder mainly in the liver and causes life-threatening episodes of hypoglycemia and metabolic acidosis (lactacidemia) in newborn infants or young children.

Sequence similarities Belongs to the FBPase class 1 family.

Images

Western blot - Anti-FBP1 antibody [EPR4620] (ab109732)

All lanes : Anti-FBP1 antibody [EPR4620] (ab109732) at 1/1000 dilution

Lane 1 : DDDK-tagged FBP1 human full-length recombinant protein, 15 ng

Lane 2 : DDDK-tagged FBP12 human full-length recombinant protein, 15 ng

Secondary

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

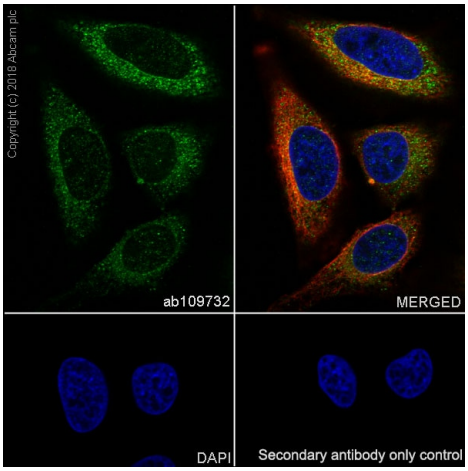
Predicted band size: 37 kDa

Observed band size: 37 kDa

Exposure time: 5 seconds

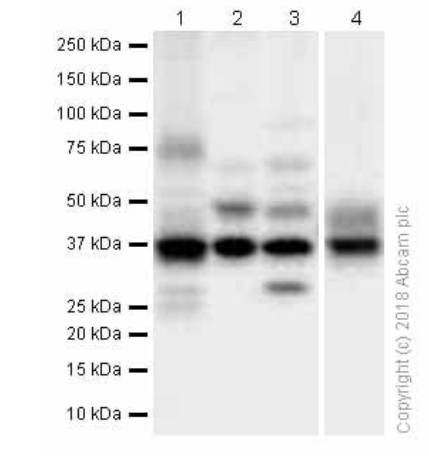
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-FBP1 antibody [EPR4620] (ab109732)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling FBP1 with purified ab109732 at 1:50 dilution (7.9 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 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-FBP1 antibody [EPR4620] (ab109732)

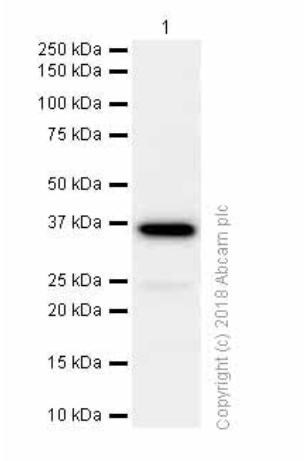
All lanes : Anti-FBP1 antibody [EPR4620] (ab109732) at 1/1000 dilution (Purified)

Lane 1 : Human kidney lysates
Lane 2 : Mouse liver lysates
Lane 3 : Mouse kidney lysates
Lane 4 : Rat liver lysates

Lysates/proteins at 20 µg per lane.

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

Predicted band size: 37 kDa
Observed band size: 36 kDa



Western blot - Anti-FBP1 antibody [EPR4620] (ab109732)

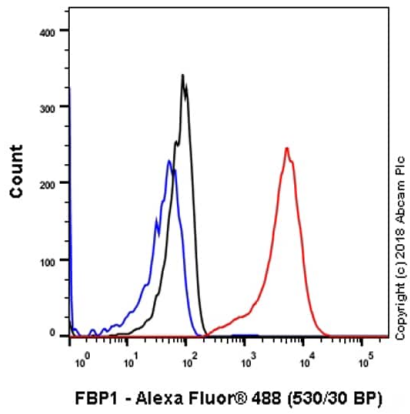
Anti-FBP1 antibody [EPR4620] (ab109732) at 1/50000 dilution + MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates at 15 µg

Secondary

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

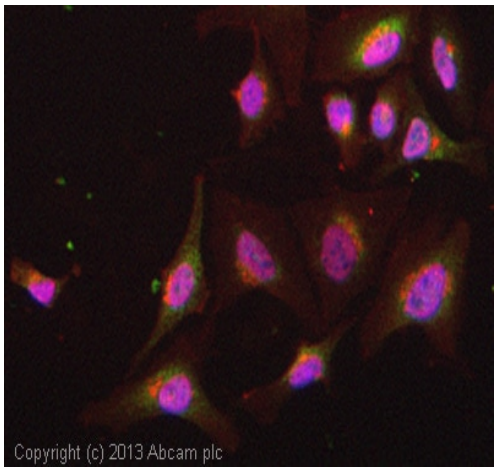
Predicted band size: 37 kDa

Observed band size: 36 kDa



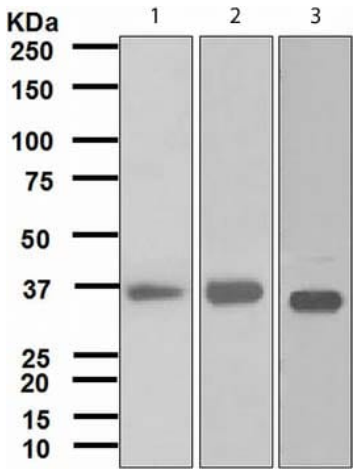
Flow Cytometry (Intracellular) - Anti-FBP1 antibody [EPR4620] (ab109732)

Intracellular Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling FBP1 with purified ab109732 at 1/400 dilution (1 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. 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/ Immunofluorescence - Anti-FBP1 antibody [EPR4620] (ab109732)

ICC/IF image of ab109732 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab109732, 10µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Anti-FBP1 antibody [EPR4620] (ab109732)

All lanes : Anti-FBP1 antibody [EPR4620] (ab109732) at 1/1000 dilution

Lane 1 : Human stomach lysate
Lane 2 : Human fetal liver lysate
Lane 3 : MCF7 lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 37 kDa

Anti-FBP1 antibody [EPR4620] (ab109732)

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