

# Anti-liver FABP antibody [EPR20464] - BSA and Azide free ab240401

Recombinant RabMAb

12 Images

### Overview

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-liver FABP antibody [EPR20464] - BSA and Azide free   |
| <b>Description</b>         | Rabbit monoclonal [EPR20464] to liver FABP - BSA and Azide free  |
| <b>Host species</b>        | Rabbit   |
| <b>Specificity</b>         | We don't recommend this antibody for mouse in IHC. In our hands mouse testis and heart tissue samples showed non-specific staining.  |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, mlHC, ICC/IF, IHC-P   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Rat, Human  |
| <b>Immunogen</b>           | Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.  |
| <b>Positive control</b>    | WB: Human fetal colon, HepG2 (human hepatocellular carcinoma epithelial cell), whole cell lysate, human fetal liver, rat and mouse liver. IHC-P: Human liver and colon tissue. Human hepatocellular carcinoma tissue. Human colon cancer and gastric cancer tissue. Rat liver tissue. ICC/IF: HepG2 cells. mlHC: Human duodenum tissue, human colon tissue.  |
| <b>General notes</b>       | <p>ab240401 is the carrier-free version of <a href="#">ab222517</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> </ul> |

- Animal-free production

For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

|                      |   |
|----------------------|---|
| Form                 | Liquid  |
| Storage instructions | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| Storage buffer       | pH: 7.2<br>Constituent: PBS                   |
| Carrier free         | Yes   |
| Purity               | Protein A purified                            |
| Clonality            | Monoclonal                                    |
| Clone number         | EPR20464                                      |
| Isotype              | IgG   |

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab240401 in the following tested applications.

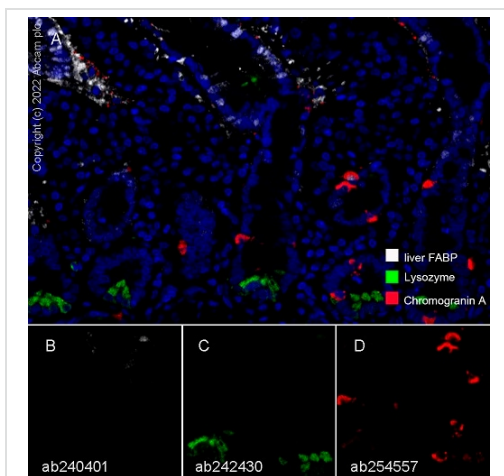
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes   |
|-------------|-----------|---|
| WB          |           | Use at an assay dependent concentration. Detects a band of approximately 14 kDa (predicted molecular weight: 14 kDa).                                       |
| mIHC        |           | Use at an assay dependent concentration.  |
| ICC/IF      |           | Use at an assay dependent concentration.  |
| IHC-P       |           | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |

## Target

|                       |  |
|-----------------------|--|
| Function              | Binds free fatty acids and their coenzyme A derivatives, bilirubin, and some other small molecules in the cytoplasm. May be involved in intracellular lipid transport. |
| Sequence similarities | Belongs to the calycin superfamily. Fatty-acid binding protein (FABP) family.  |
| Domain                | Forms a beta-barrel structure that accommodates hydrophobic ligands in its interior.   |
| Cellular localization | Cytoplasm.   |

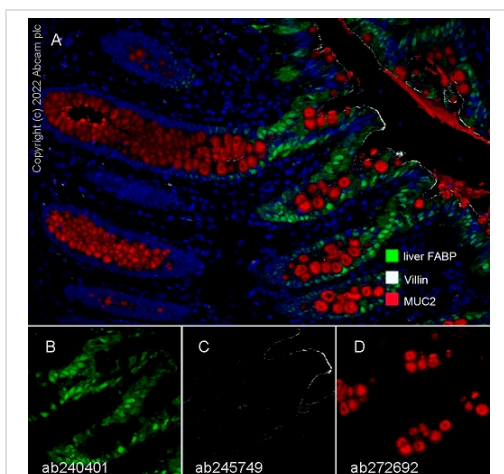
## Images



Multiplex immunohistochemistry - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Fluorescence multiplex immunohistochemical analysis of the human duodenum (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-liver FABP (ab240401, gray; Opal™690), anti-Lysozyme ([ab242430](#), green; Opal™520) and anti-Chromogranin A ([ab254557](#), red; Opal™570) on human duodenum. Panel B: anti-liver FABP stained on enterocytes. Panel C: anti-Lysozyme stained on Paneth cells. Panel D: anti-Chromogranin A stained on neuroendocrine cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of ab240401 (1/8000 dilution), [ab242430](#) (1:250 dilution), and [ab254557](#) (1/5000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).

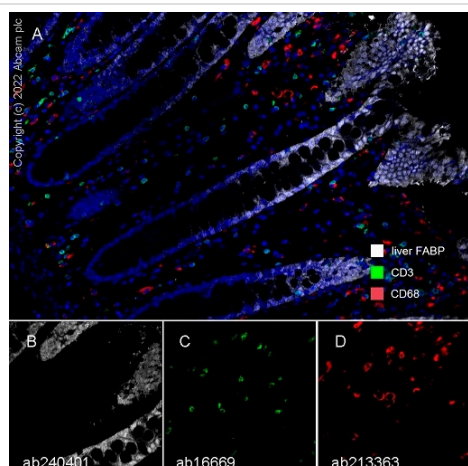


Multiplex immunohistochemistry - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Fluorescence multiplex immunohistochemical analysis of the human colon (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-Villin ([ab245749](#), gray; Opal™690), anti-liver FABP (ab240401, green; Opal™520) and anti-MUC2 ([ab272692](#), red; Opal™570) on human colon. Panel B: anti-liver FABP stained on enterocytes. Panel C: anti-Villin stained on apical border. Panel D: anti-MUC2 stained on goblet cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of [ab245749](#) (1/1000 dilution), ab240401 (1/8000 dilution), and [ab272692](#) (1/5000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

This data was developed using the same antibody clone in a

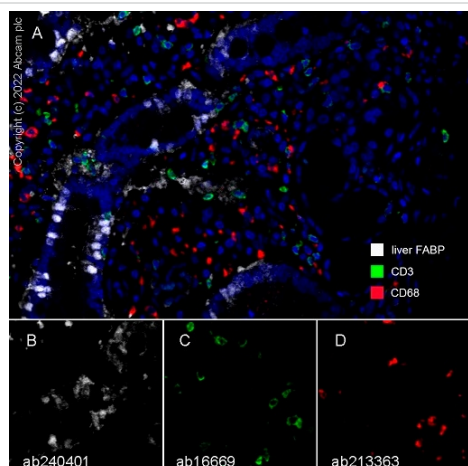
different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).



Multiplex immunohistochemistry - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Fluorescence multiplex immunohistochemical analysis of the human colon (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-liver FABP (ab240401, gray; Opal™690), anti-CD3 ([ab16669](#), green; Opal™520) and anti-CD68 ([ab213363](#), red; Opal™570) on human colon. Panel B: anti-liver FABP stained on enterocytes. Panel C: anti-CD3 stained on T cells. Panel D: anti-CD68 stained on macrophages. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of ab240401 (1/8000 dilution), [ab16669](#) (1/150 dilution), and [ab213363](#) (1/500 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).

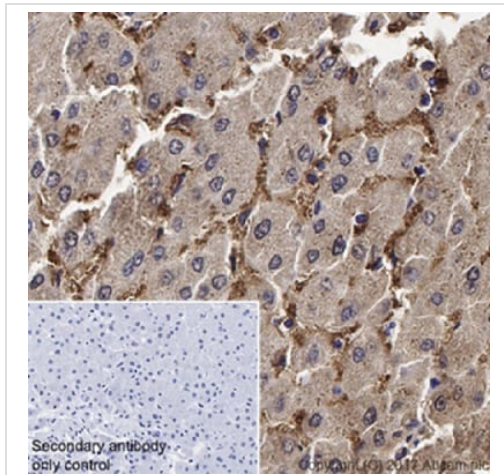


Multiplex immunohistochemistry - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Fluorescence multiplex immunohistochemical analysis of the human duodenum (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-liver FABP (ab240401, gray; Opal™690), anti-CD3 ([ab16669](#), green; Opal™520) and anti-CD68 ([ab213363](#), red; Opal™570) on human duodenum. Panel B: anti-liver FABP stained on enterocytes. Panel C: anti-CD3 stained on T cells. Panel D: anti-CD68 stained on macrophages. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of ab240401 (1/8000 dilution), [ab16669](#) (1/150 dilution), and [ab213363](#) (1/500 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

sodium azide ([ab222517](#)).



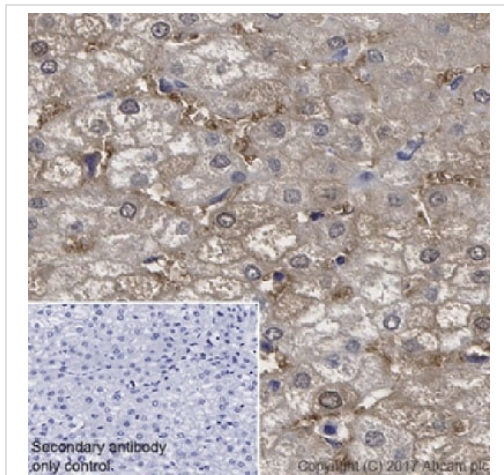
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling liver FABP with [ab222517](#) at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic staining on human hepatocytes and sinusoids (PMID: 3123629). Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

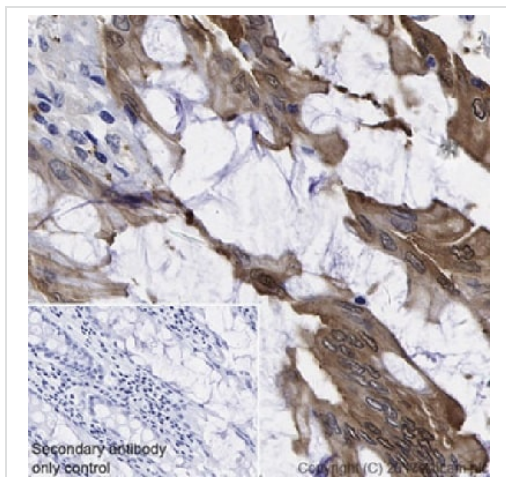
Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma tissue labeling liver FABP with [ab222517](#) at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic and weak nuclear staining on human hepatocellular carcinoma. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).





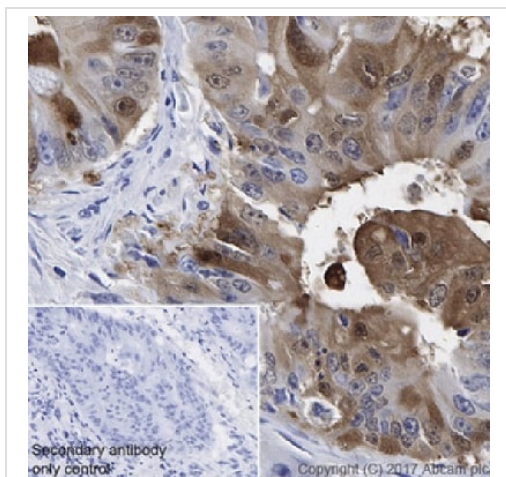
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling liver FABP with [ab222517](#) at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic and weak nuclear staining on human colon (PMID: 15138477). Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).



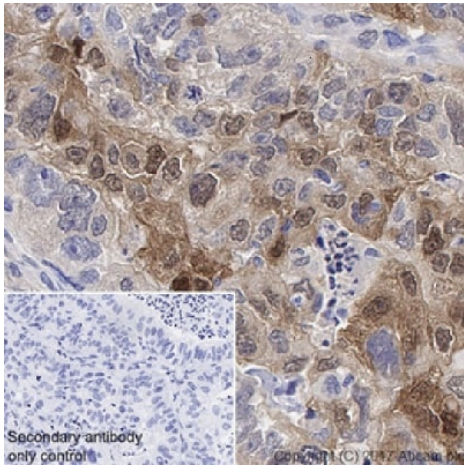
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labeling liver FABP with [ab222517](#) at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic and nuclear staining on human colon cancer (PMID: 15138477). Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).



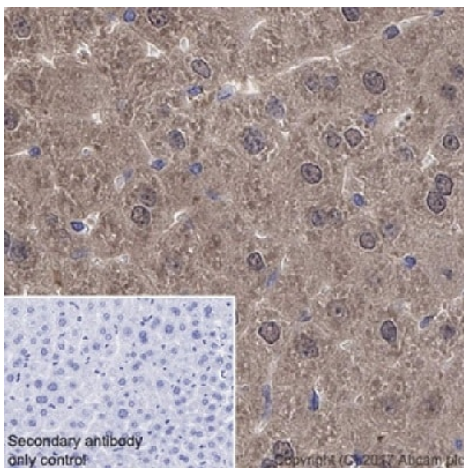
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Immunohistochemical analysis of paraffin-embedded human gastric cancer tissue labeling liver FABP with [ab222517](#) at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Nuclear and cytoplasmic staining on human gastric cancer (PMID: 15051923). Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).



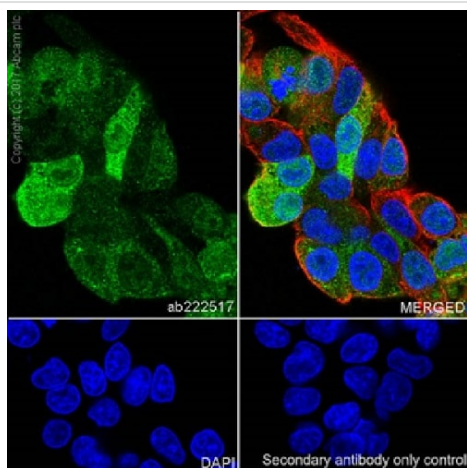
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Immunohistochemical analysis of paraffin-embedded rat liver tissue labeling liver FABP with [ab222517](#) at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Nuclear and cytoplasmic staining on rat liver is observed. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab222517](#)).



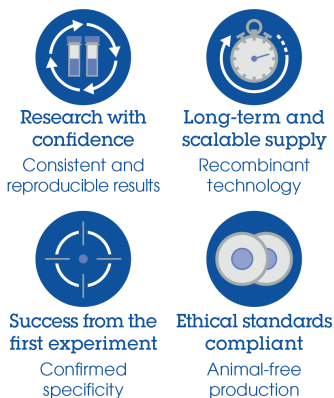
Immunocytochemistry/ Immunofluorescence - Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

Immunofluorescent analysis of 4% paraformaldehyde fixed, 0.1% tritonX-100 permeabilized HepG2 (human hepatocellular carcinoma epithelial cell) cells labeling liver FABP with **ab222517** at 1/100 dilution, followed by AlexaFluor®488 Goat anti-Rabbit secondary (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and cytoplasmic staining on HepG2 cell line. Nuclear counterstain DAPI (blue). Counterstain Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (red).

The negative control was secondary antibody only.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab222517**).

### Why choose a recombinant antibody?



Anti-liver FABP antibody [EPR20464] - BSA and Azide free (ab240401)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"



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