

## Product datasheet

### Anti-LLGL1 + LLGL2 antibody [EPR18899] ab183021

Recombinant RabMAb

[1 References](#) [10 Images](#)

#### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-LLGL1 + LLGL2 antibody [EPR18899]  |
| <b>Description</b>         | Rabbit monoclonal [EPR18899] to LLGL1 + LLGL2   |
| <b>Host species</b>        | Rabbit  |
| <b>Specificity</b>         | The immunogen used for this product shares 53% identity (67% positives) with LLGL2. Cross-reactivity with this protein has not been confirmed experimentally.   |
| <b>Tested applications</b> | <b>Suitable for:</b> IHC-P, WB, ICC/IF, IP  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human   |
| <b>Immunogen</b>           | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.  |
| <b>Positive control</b>    | WB: HepG2, SW480, A431, Caco-2 and 293 whole cell lysates; Human fetal liver, fetal heart and fetal kidney lysates. IHC-P: Human kidney and stomach tissues. ICC/IF: HepG2 and SW480 cells. IP: HepG2 whole cell lysate.  |
| <b>General notes</b>       | <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> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> |

#### Properties

|                             |  |
|-----------------------------|--|
| <b>Form</b>                 | Liquid   |
| <b>Storage instructions</b> | 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.  |
| <b>Storage buffer</b>       | <p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)</p> |
| <b>Purity</b>               | Protein A purified   |
| <b>Clonality</b>            | Monoclonal   |

|              |          |
|--------------|----------|
| Clone number | EPR18899 |
| Isotype      | IgG      |

Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab183021 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

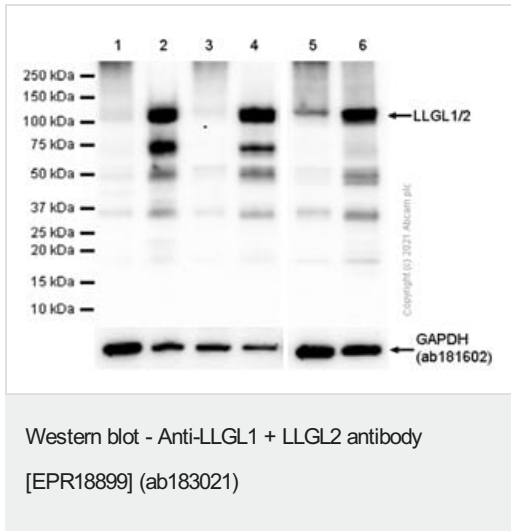
| Application | Abreviews | Notes   |
|-------------|-----------|---|
| IHC-P       |           | 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| WB          |           | 1/2000. Detects a band of approximately 115 kDa (predicted molecular weight: 115 kDa).                                    |
| ICC/IF      |           | 1/100.  |
| IP          |           | 1/50.   |

Target

**Relevance** LLGL1 is a protein that is similar to a tumor suppressor in Drosophila. The protein is part of a cytoskeletal network and is associated with nonmuscle myosin II heavy chain and a kinase that specifically phosphorylates this protein at serine residues. The gene for LLGL1 is located within the Smith-Magenis syndrome region on chromosome 17. LLGL2 is a protein similar to lethal (2) giant larvae of Drosophila. In fly, the protein's ability to localize cell fate determinants is regulated by the atypical protein kinase C (aPKC). In human, this protein interacts with aPKC-containing complexes and is cortically localized in mitotic cells.

**Cellular localization** Cytoplasmic

Images



**All lanes :** Anti-LLGL1 + LLGL2 antibody [EPR18899] (ab183021) at 1/2000 dilution

- Lane 1 :** A431 (Human epidermoid carcinoma epithelial cell) whole cell lysate prepared in RIPA lysis method
- Lane 2 :** A431 (Human epidermoid carcinoma epithelial cell) whole cell lysate prepared in 1% SDS Hot lysis method
- Lane 3 :** SW480 (Human colorectal adenocarcinoma epithelial cell) whole cell lysate prepared in RIPA lysis method
- Lane 4 :** SW480 (Human colorectal adenocarcinoma epithelial cell) whole cell lysate prepared in 1% SDS Hot lysis method
- Lane 5 :** Caco-2 (Human colorectal adenocarcinoma epithelial cell)

whole cell lysate prepared in RIPA lysis method

**Lane 6 :** Caco-2 (Human colorectal adenocarcinoma epithelial cell)

whole cell lysate prepared in 1% SDS Hot lysis method

Lysates/proteins at 15 µg per lane.

### Secondary

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

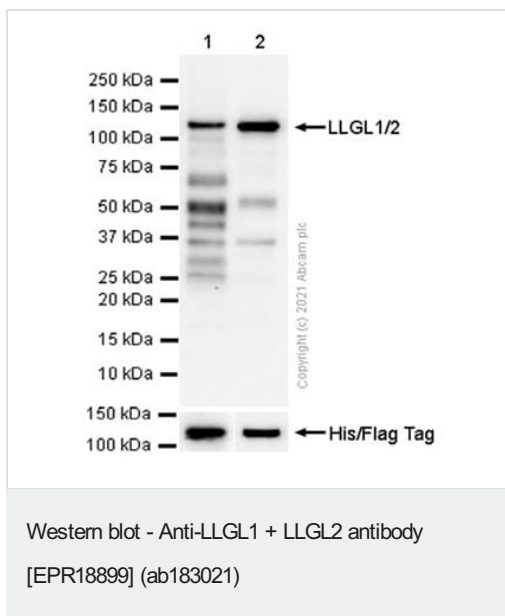
**Predicted band size:** 115 kDa

**Observed band size:** 115 kDa

**Exposure time:** 20 seconds

Blocking buffer: 5% NFDM/TBST.

We recommend to use 1% SDS Hot lysis method to get desired WB results.



**All lanes :** Anti-LLGL1 + LLGL2 antibody [EPR18899] (ab183021) at 1/10000 dilution

**Lane 1 :** His tagged human LLGL1 full length recombinant protein

**Lane 2 :** Flag tagged human LLGL2 full length recombinant protein

Lysates/proteins at 0.01 µg per lane.

### Secondary

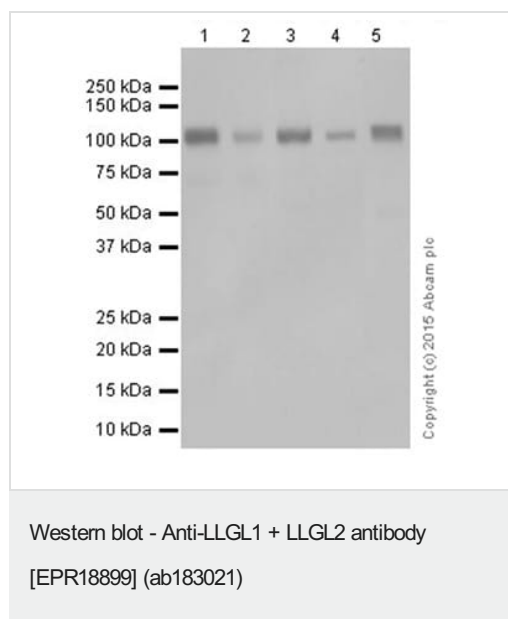
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 115 kDa

**Observed band size:** 120 kDa

**Exposure time:** 40 seconds

Blocking buffer: 5% NFDM/TBST.



**All lanes :** Anti-LLGL1 + LLGL2 antibody [EPR18899] (ab183021)  
at 1/5000 dilution

**Lane 1 :** HepG2 cell lysate

**Lane 2 :** A431 cell lysate

**Lane 3 :** SW480 cell lysate

**Lane 4 :** A459 cell lysate

**Lane 5 :** Caco-2 cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

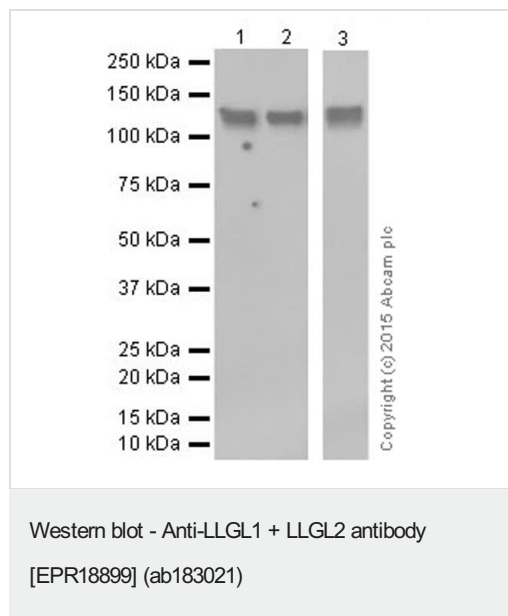
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at  
1/100000 dilution

**Predicted band size:** 115 kDa

**Observed band size:** 115 kDa

Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



**All lanes :** Anti-LLGL1 + LLGL2 antibody [EPR18899] (ab183021)  
at 1/2000 dilution

**Lane 1 :** Human fetal liver lysate

**Lane 2 :** Human fetal heart lysate

**Lane 3 :** Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

### Secondary

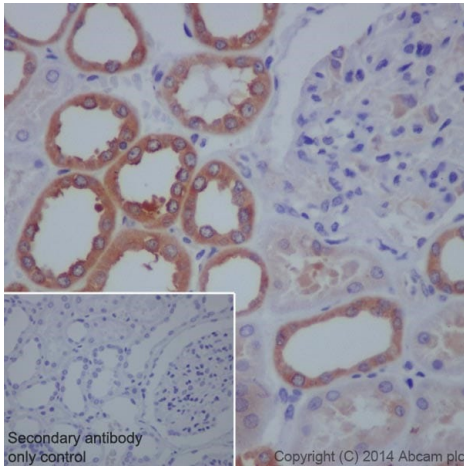
**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to  
the non-reduced form of IgG at 1/10000 dilution

**Predicted band size:** 115 kDa

**Observed band size:** 115 kDa

Blocking/dilution buffer: 5% NFDm/TBST.

Exposure time Lane 1/2: 3 minutes; Lane 3: 15 seconds.

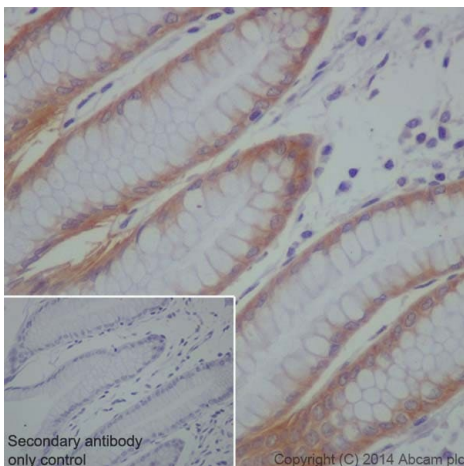


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LLGL1 + LLGL2 antibody [EPR18899] (ab183021)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling LLGL1 with ab183021 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasm staining on Human kidney is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

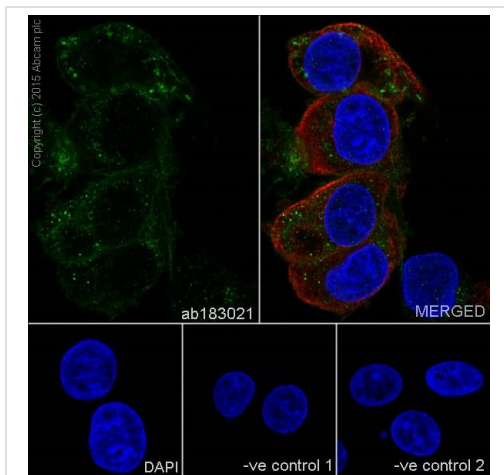


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LLGL1 + LLGL2 antibody [EPR18899] (ab183021)

Immunohistochemical analysis of paraffin-embedded Human stomach tissue labeling LLGL1 with ab183021 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasm staining on Human stomach is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



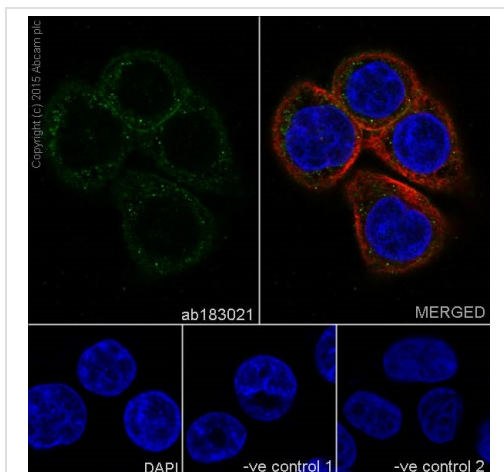
Immunocytochemistry/ Immunofluorescence - Anti-LLGL1 + LLGL2 antibody [EPR18899] (ab183021)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling LLGL1 with ab183021 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HepG2 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [EPR18899]-Loading Control (**ab7291**) at 1/1000 dilution and Goat Anti-Mouse IgG (AlexaFluor®594) preadsorbed (**ab150120**) at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab183021 at 1/100 dilution followed by **ab150120** at 1/1000 dilution.

-ve control 2: **ab7291** at 1/1000 dilution followed by **ab150077** at 1/1000 dilution.



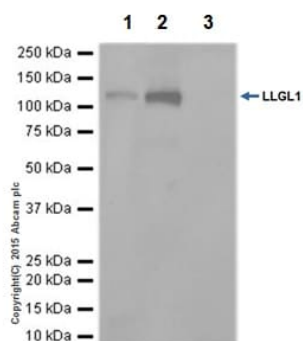
Immunocytochemistry/ Immunofluorescence - Anti-LLGL1 + LLGL2 antibody [EPR18899] (ab183021)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SW480 (Human colorectal adenocarcinoma cell line) cells labeling LLGL1 with ab183021 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on SW480 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [EPR18899]-Loading Control (**ab7291**) at 1/1000 dilution and Goat Anti-Mouse IgG (AlexaFluor®594) preadsorbed (**ab150120**) at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab183021 at 1/100 dilution followed by **ab150120** at 1/1000 dilution.

-ve control 2: **ab7291** at 1/1000 dilution followed by **ab150077** at 1/1000 dilution.



Immunoprecipitation - Anti-LLGL1 + LLGL2 antibody  
[EPR18899] (ab183021)

LLGL1 was immunoprecipitated from 1 mg of HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with ab183021 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab183021 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: HepG2 whole cell lysate 10 µg (Input).

Lane 2: ab183021 IP in HepG2 whole cell lysate.

Lane 3: Rabbit IgG, monoclonal [EPR18899] - Isotype Control (**ab172730**) instead of ab183021 in HepG2 whole cell lysate.

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

Exposure time: 10 seconds.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-LLGL1 + LLGL2 antibody [EPR18899]  
(ab183021)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors