

## Product datasheet

### Anti-CD81 antibody [EPR21916] $\alpha$ b219209

Recombinant **RabMAb**

★★★★★ **3 Abreviews** **9 References** **6 Images**

#### Overview

<b>Product name</b>	Anti-CD81 antibody [EPR21916]
<b>Description</b>	Rabbit monoclonal [EPR21916] to CD81
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, ICC/IF, Flow Cyt
<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>	IHC-P: Human liver, tonsil and diffuse large B cell lymphoma tissues. ICC/IF: Jurkat cells. Flow Cyt: Jurkat cells.
<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: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR21916
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab219209 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)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/100.
Flow Cyt		1/600.

## Target

### Function

May play an important role in the regulation of lymphoma cell growth. Interacts with a 16-kDa Leu-13 protein to form a complex possibly involved in signal transduction. May acts a the viral receptor for HCV.

### Tissue specificity

Hematolymphoid, neuroectodermal and mesenchymal tumor cell lines.

### Involvement in disease

Defects in CD81 are the cause of immunodeficiency common variable type 6 (CVID6) [MIM:613496]; also called antibody deficiency due to CD81 defect. CVID6 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen. The defect results from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of circulating B cells is usually in the normal range, but can be low.

### Sequence similarities

Belongs to the tetraspanin (TM4SF) family.

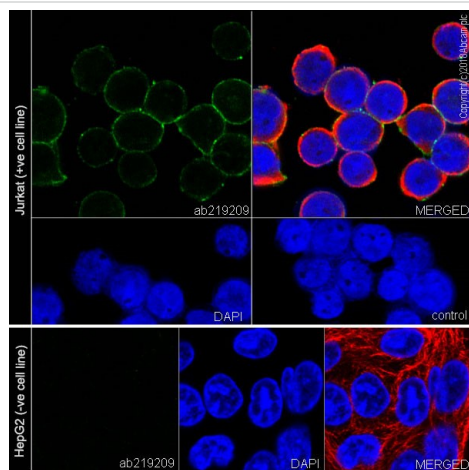
### Post-translational modifications

Not glycosylated.

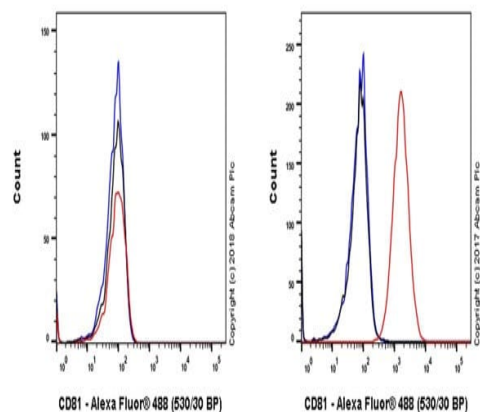
### Cellular localization

Membrane.

## Images



Immunocytochemistry/ Immunofluorescence - Anti-CD81 antibody [EPR21916] (ab219209)



Flow Cytometry - Anti-CD81 antibody [EPR21916] (ab219209)

Immunofluorescent analysis of 100% methanol-fixed Jurkat (human T cell leukemia cell line from peripheral blood) cells and HepG2 (human liver hepatocellular carcinoma cell line) cells labeling CD81 with ab219209 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green).

Confocal image showing membranous staining in Jurkat cells.

**Negative control:** HepG2 (PMID: 16641285).

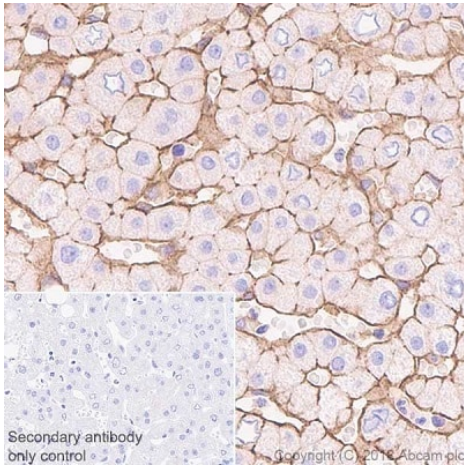
The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) ([ab195889](#)) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/1000 dilution.

Flow cytometric analysis of Jurkat (human T cell leukemia cell line from peripheral blood) cells and HepG2 (human liver hepatocellular carcinoma cell line) cell lines labeling CD81 with ab219209 at 1/600 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control ([ab172730](#)) (black) and an unlabeled control (cells incubated with secondary antibody only) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

**Negative control:** HepG2 (PMID: 16641285).

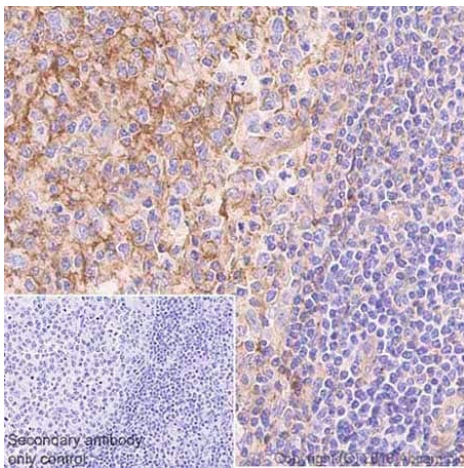


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD81 antibody  
[EPR21916] (ab219209)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling CD81 with ab219209 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Mainly membranous staining in human liver (PMID: 19489072). Counter stained with hematoxylin.

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

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

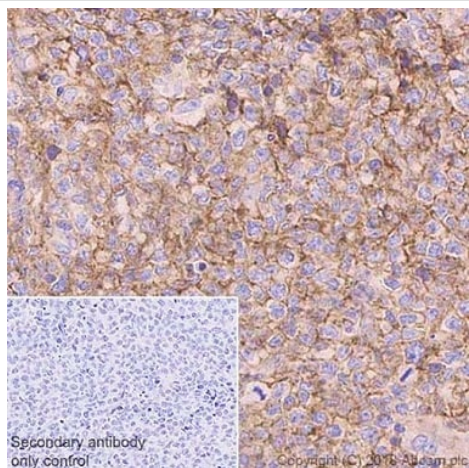


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD81 antibody  
[EPR21916] (ab219209)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CD81 with ab219209 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in the germinal center of human tonsil (PMID: 20004001). Counter stained with hematoxylin.

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

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD81 antibody [EPR21916] (ab219209)

Immunohistochemical analysis of paraffin-embedded human diffuse large B cell lymphoma tissue labeling CD81 with ab219209 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining on tumor cells of human diffuse large B cell lymphoma (PMID: 20004001). Counter stained with hematoxylin.

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

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

#### 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-CD81 antibody [EPR21916] (ab219209)

**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