

## Product datasheet

# Anti-HLA Class 1 ABC antibody [EPR22172] ab225636

Recombinant RabMAb

[2 References](#) [12 Images](#)

### Overview

<b>Product name</b>	Anti-HLA Class 1 ABC antibody [EPR22172]
<b>Description</b>	Rabbit monoclonal [EPR22172] to HLA Class 1 ABC
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-Fr, WB, IHC-P, ICC/IF, Flow Cyt, 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>	ICC/IF: THP-1 and Raji cells. Flow Cyt: Raji and THP-1 cells. IHC-P: Human colonic carcinoma, stomach and liver tissue. WB: Raji, THP-1, HL-60, Jurkat, HepG2, TF-1 and Ramos whole cell lysate. Human tonsil. Recombinant human HLA-A protein (aa24-aa365). Recombinant human HLA-C protein (aa25-aa308). IP: HLAB in THP-1 whole cell lysate. IHC-Fr: Human frozen spleen and liver tissue sections.
<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>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR22172  
**Isotype**                                IgG

## Applications

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**The Abpromise guarantee**        Our **Abpromise guarantee** covers the use of ab225636 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-Fr		Use a concentration of 0.05 µg/ml.
WB		1/1000. Detects a band of approximately 40 kDa (predicted molecular weight: 40 kDa).
IHC-P		1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/250.
Flow Cyt		1/600.
IP		1/30.

## Target

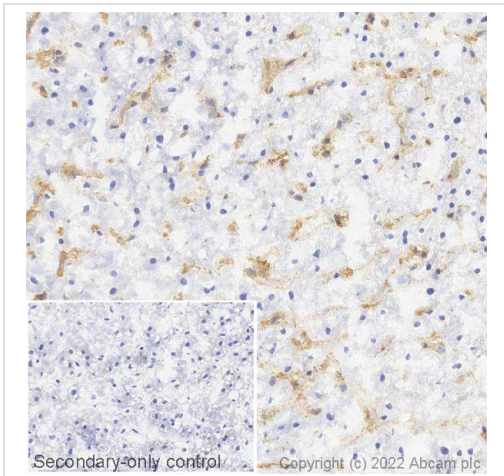
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**Relevance**                            HLA-ABC antigen is present on most nucleated cells of humans and Old World monkeys. HLA Class I is involved in the presentation of foreign antigens to the immune system.

**Cellular localization**            Cell Membrane; Single-pass type I membrane protein

## Images

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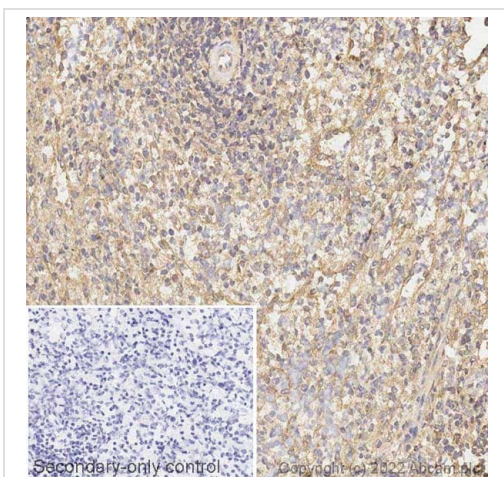


Immunohistochemistry (Frozen sections) - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)  
Lab

IHC image of HLA Class 1 ABC staining in a section of human normal frozen liver\* performed on a Leica Biosystems BOND® RX instrument using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab225636, 0.05ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

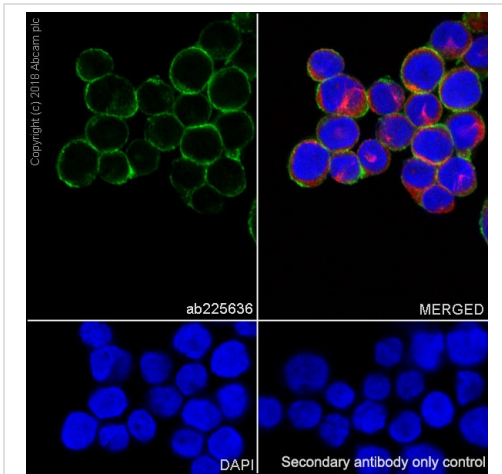


Immunohistochemistry (Frozen sections) - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)  
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IHC image of HLA Class 1 ABC staining in a section of human normal frozen spleen\* performed on a Leica Biosystems BOND® RX instrument using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab225636, 0.05ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

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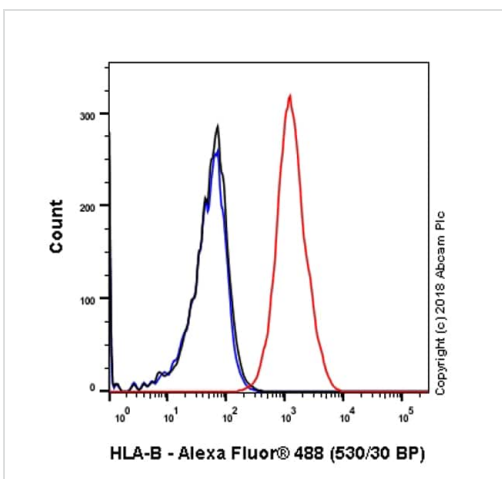
Immunocytochemistry/ Immunofluorescence - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

Immunofluorescent analysis of 100% methanol-fixed THP-1 (human monocytic leukemia cell line) cells labeling HLAB with ab225636 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in THP-1 cells. The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) at 1/200 dilution (red).

The negative control is the secondary antibody only.

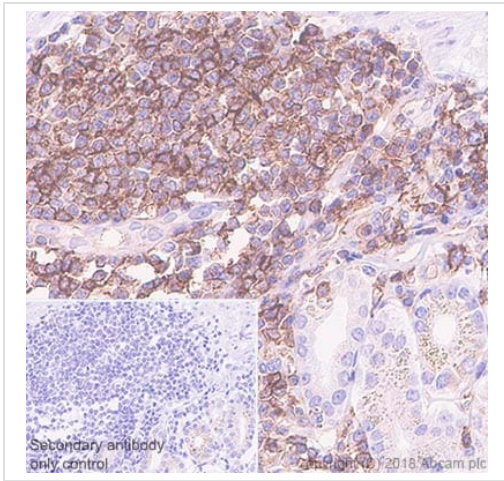
Methanol is recommended for fixation as weak signal was observed using 4% PFA.



Flow Cytometry - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

Flow cytometric analysis of Raji (human Burkitt's lymphoma cell line) cells labeling HLAB with ab225636 at 1/600 (red) compared with a Rabbit monoclonal IgG (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti-rabbit IgG (Alexa Fluor<sup>®</sup> 488, **ab150077**), at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

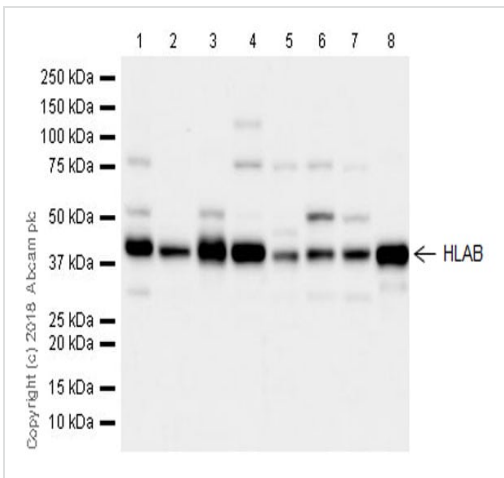


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

Immunohistochemical analysis of paraffin-embedded human stomach tissue labeling HLAB with ab225636 at 1/4000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous and cytoplasmic staining on lymph nodule of human stomach (PMID:25294906) is observed. Counter stained with hematoxylin.

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

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



Western blot - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

**All lanes** : Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636) at 1/1000 dilution

**Lane 1** : Raji (human Burkitt's lymphoma cell line), whole cell lysate

**Lane 2** : THP-1 (human monocytic leukemia cell line), whole cell lysate

**Lane 3** : HL-60 (human promyelocytic leukemia cell line), whole cell lysate

**Lane 4** : Jurkat (human T cell leukemia cell line from peripheral blood), whole cell lysate

**Lane 5** : HepG2 (human liver hepatocellular carcinoma cell line), whole cell lysate

**Lane 6** : TF-1 (human bone marrow erythroleukemia cell line), whole cell lysate

**Lane 7** : Ramos (human Burkitt's lymphoma cell line), whole cell lysate

**Lane 8** : Human tonsil

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

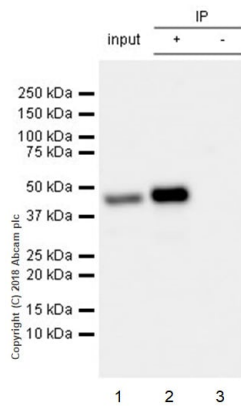
**Predicted band size:** 40 kDa

**Observed band size:** 40 kDa

**Exposure time:** 26 seconds

**Blocking/Dilution buffer:** 5% NFD/MTBST.

Weak reactive bands of undetermined proteins are observed in addition to the target band.



Immunoprecipitation - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

HLAB was immunoprecipitated from 0.35 mg THP-1 (human monocytic leukemia cell line) whole cell lysate with ab225636 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab225636 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/1000 dilution.

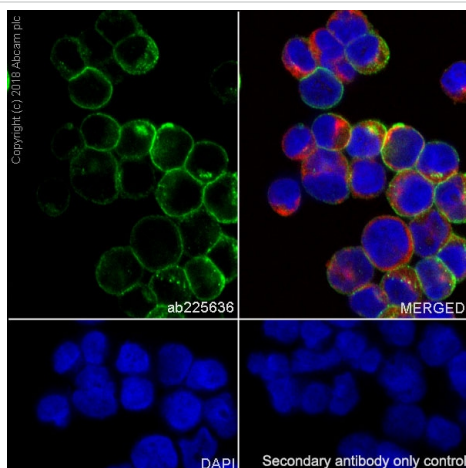
**Lane 1:** THP-1 whole cell lysate 10  $\mu$ g (Input).

**Lane 2:** ab225636 IP in THP-1 whole cell lysate.

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab225636 in THP-1 whole cell lysate.

**Blocking/Dilution buffer:** 5% NFD/MTBST.

**Exposure time:** 3 seconds.



Immunocytochemistry/ Immunofluorescence - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

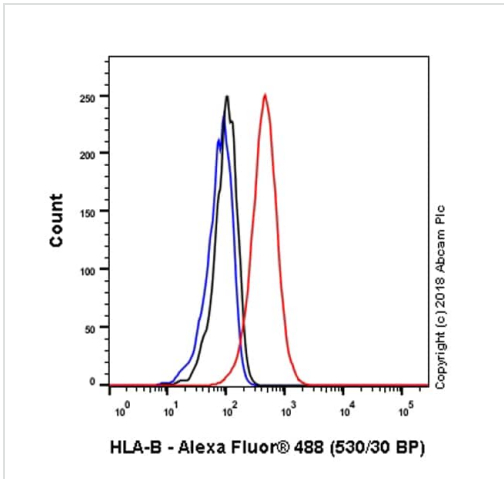
Immunofluorescent analysis of 100% methanol-fixed Raji (human Burkitt's lymphoma cell line) cells labeling HLAB with ab225636 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in Raji cells. The nuclear counterstain is DAPI (blue).

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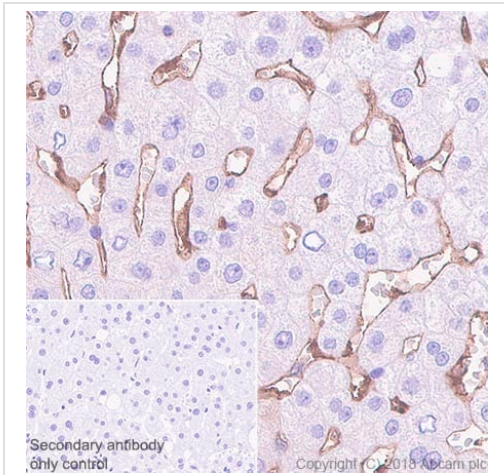




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[EPR22172] (ab225636)

Flow cytometric analysis of THP-1 (human monocytic leukemia cell line) cell line labeling HLAB with ab225636 at 1/600 (red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)), at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

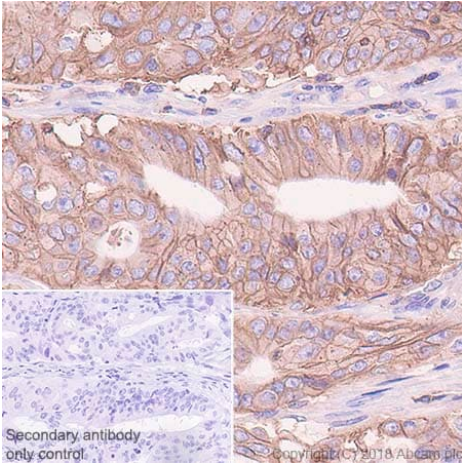


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling HLAB with ab225636 at 1/4000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on hepatic sinus endothelium of human liver (PMID: 26963506) is observed. Counter stained with hematoxylin.

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





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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

Immunohistochemical analysis of paraffin-embedded human colonic carcinoma tissue labeling HLAB with ab225636 at 1/4000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous and cytoplasmic staining on tumor cells of human colonic carcinoma (PMID: 26310568, PMID: 17014712) is observed. Counter stained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-HLA Class 1 ABC antibody [EPR22172] (ab225636)

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

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