

## Product datasheet

### Anti-HLA DMB antibody [EPR7981] ab133640

Recombinant RabMAb

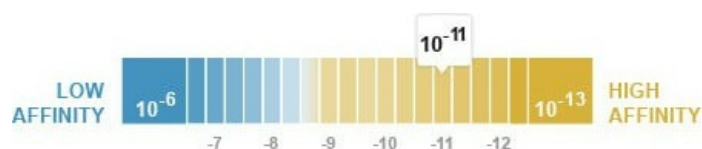
[1 References](#) [5 Images](#)

#### Overview

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-HLA DMB antibody [EPR7981]  |
| <b>Description</b>         | Rabbit monoclonal [EPR7981] to HLA DMB   |
| <b>Host species</b>        | Rabbit   |
| <b>Tested applications</b> | <b>Suitable for:</b> Flow Cyt (Intra), WB<br><b>Unsuitable for:</b> IHC-P or IP  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human  |
| <b>Immunogen</b>           | Synthetic peptide within Human HLA DMB aa 50-150. The exact sequence is proprietary.   |
| <b>Positive control</b>    | WB: Raji, Daudi, Human spleen, 293T with His tagged HLA DMB expression vector transfected cell lysates. Flow Cyt (intra): Raji 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> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p> |

#### Properties

|  |  |
|--|--|
| <b>Form</b>                                  | Liquid   |
| <b>Storage instructions</b>                  | Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. |
| <b>Dissociation constant (K<sub>D</sub>)</b> | K <sub>D</sub> = 7.40 x 10 <sup>-11</sup> M                    |



## [Learn more about K<sub>D</sub>](#)

|                       |   |
|-----------------------|---|
| <b>Storage buffer</b> | pH: 7.20<br>Preservative: 0.01% Sodium azide<br>Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant |
| <b>Purity</b>         | Tissue culture supernatant  |
| <b>Clonality</b>      | Monoclonal  |
| <b>Clone number</b>   | EPR7981   |
| <b>Isotype</b>        | IgG   |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab133640 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

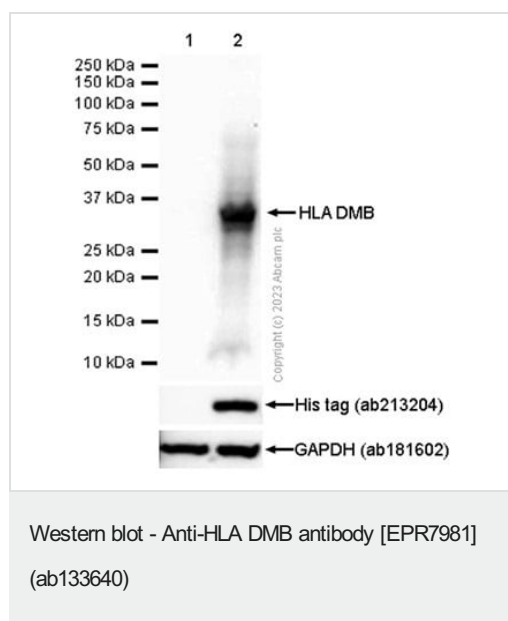
| Application             | Abreviews | Notes   |
|-------------------------|-----------|---|
| <b>Flow Cyt (Intra)</b> |           | 1/100 - 1/500.<br><b><u>ab172730</u></b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |
| <b>WB</b>               |           | 1/1000 - 1/10000. Predicted molecular weight: 29 kDa.   |

**Application notes** Is unsuitable for IHC-P or IP.

## Target

|                              |   |
|------------------------------|---|
| <b>Relevance</b>             | HLA-DMB belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DMA) and a beta (DMB) chain, both anchored in the membrane. It is located in intracellular vesicles. DM plays a central role in the peptide loading of MHC class II molecules by helping to release the CLIP (class II-associated invariant chain peptide) molecule from the peptide binding site. Class II molecules are expressed in antigen presenting cells (APC: B lymphocytes, dendritic cells, macrophages). The beta chain is approximately 26-28 kDa and its gene contains 6 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and exon 5 encodes the cytoplasmic tail. |
| <b>Cellular localization</b> | Late endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein. Note=Localizes to late endocytic compartment. Associates with lysosome membranes.  |

## Images



**All lanes :** Anti-HLA DMB antibody [EPR7981] (ab133640) at 1/10000 dilution

**Lane 1 :** 293T (Human embryonic kidney epithelial cell) whole cell lysate with blank vector transfected

**Lane 2 :** 293T (Human embryonic kidney epithelial cell) whole cell lysate with His tagged HLA DMB expression vector transfected

Lysates/proteins at 15 µg per lane.

### Secondary

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

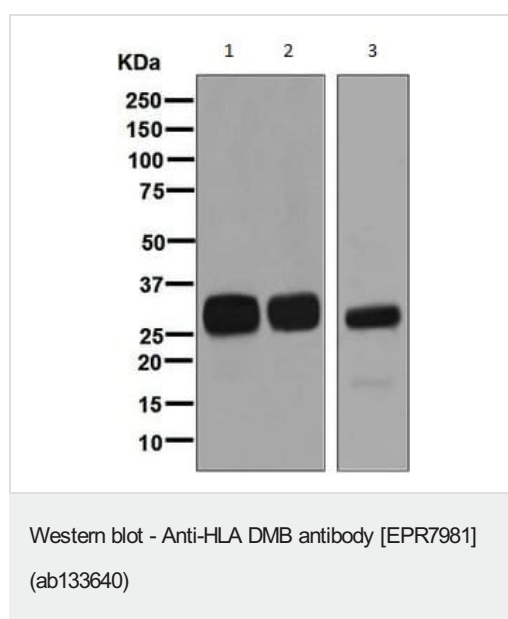
**Predicted band size:** 29 kDa

**Observed band size:** 29 kDa

**Exposure time:** 1 second

**Blocking and diluting buffer and concentration:** 5% NFDM/TBST.

[ab181602](#) was used as a loading control.



**All lanes :** Anti-HLA DMB antibody [EPR7981] (ab133640) at 1/1000 dilution

**Lane 1 :** Raji lysate

**Lane 2 :** Daudi lysate

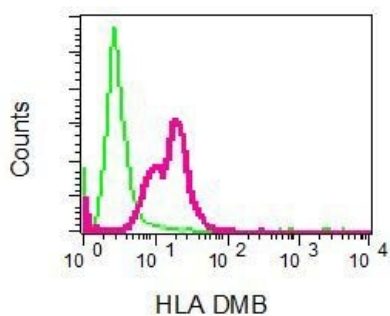
**Lane 3 :** Human spleen lysate

Lysates/proteins at 10 µg per lane.

### Secondary

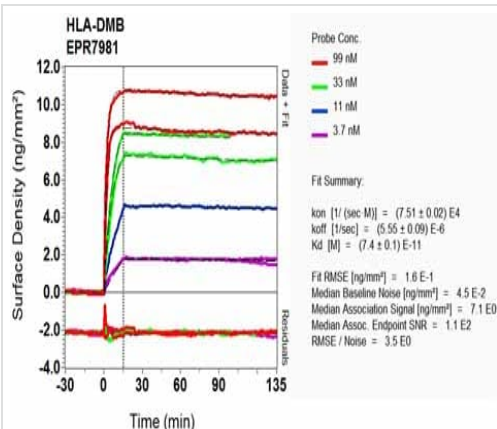
**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 29 kDa



Flow Cytometry (Intracellular) - Anti-HLA DMB antibody [EPR7981] (ab133640)

Intracellular Flow Cytometry analysis of permeabilized Raji cells labelling HLA DMB with ab133640 at 1/100 dilution (red). Rabbit IgG (negative control) shown in green.



BI-RD Scanning - Anti-HLA DMB antibody [EPR7981] (ab133640)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

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-HLA DMB antibody [EPR7981] (ab133640)

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

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