

## Product datasheet

# Anti-HLA DMB antibody [EPR7982] ab131273

Recombinant RabMAb

[3 References](#) [7 Images](#)

### Overview

<b>Product name</b>	Anti-HLA DMB antibody [EPR7982]
<b>Description</b>	Rabbit monoclonal [EPR7982] to HLA DMB
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF <b>Unsuitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human colon tissue and tonsil tissue. ICC/IF: Raji cells and 293T cells. WB: HEK-293T cells transfected with a human HLA-DMB expression vector containing a his tag whole cell lysate, Raji, and Daudi cell lysates.
<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>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR7982
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab131273 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>WB</b>		1/1000 - 1/10000. Predicted molecular weight: 29 kDa.
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
<b>ICC/IF</b>		1/100 - 1/500.

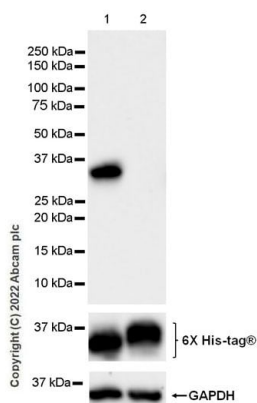
**Application notes** Is unsuitable for Flow Cyt.

## Target

**Relevance** 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.

**Cellular localization** 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



Western blot - Anti-HLA DMB antibody [EPR7982] (ab131273)

**All lanes** : Anti-HLA DMB antibody [EPR7982] (ab131273) at 1/1000 dilution

**Lane 1** : HEK-293T cells transfected with a human HLA-DMB expression vector containing a his tag, whole cell lysate

**Lane 2** : HEK-293T cells transfected with a human NEK6 expression vector containing a his tag, whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

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

**Predicted band size:** 29 kDa

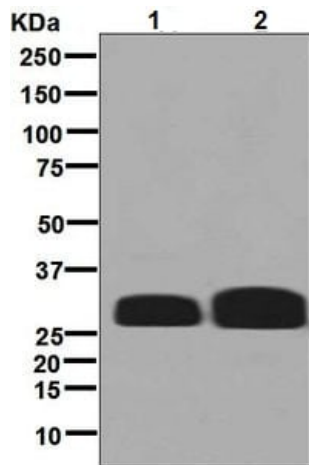
**Observed band size:** 29 kDa

**Exposure time:** 26 seconds

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

**Diluting buffer and concentration** : 5% NFDM/TBST

This antibody does not cross-react with human NEK6.



Western blot - Anti-HLA DMB antibody [EPR7982] (ab131273)

**All lanes** : Anti-HLA DMB antibody [EPR7982] (ab131273) at 1/1000 dilution

**Lane 1** : Raji cell lysate

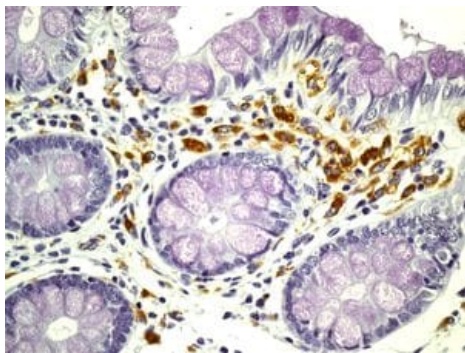
**Lane 2** : Daudi cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

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

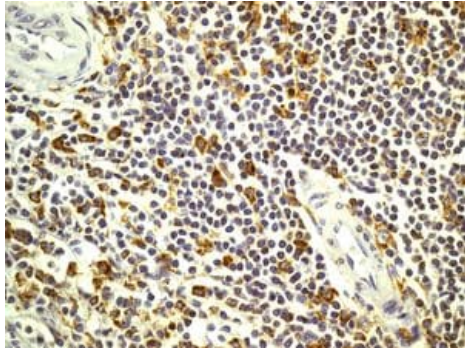
**Predicted band size:** 29 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HLA DMB antibody [EPR7982] (ab131273)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling HLA DMB with ab131273 at 1/100 dilution.

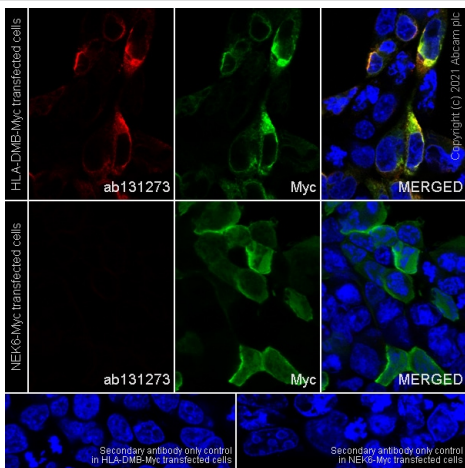
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HLA DMB antibody [EPR7982] (ab131273)

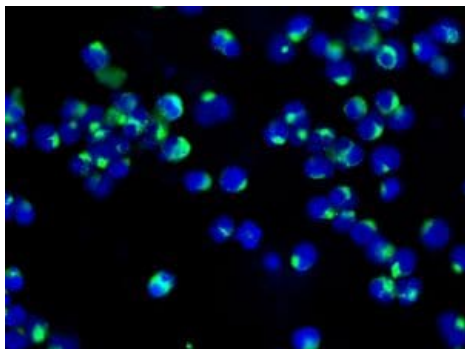
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labelling HLA DMB with ab131273 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-HLA DMB antibody [EPR7982] (ab131273)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized 293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cells labelling HLA DMB with primary antibody anti-HLA DMB (ab131273) at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) ([ab150080](#)) secondary antibody at 1/500 dilution. Confocal image showing cytoplasmic staining in 293T cells transfected with myc-tagged HLA-DMB expression vector, no staining in 293T cells transfected with myc-tagged NEK6 expression vector. Anti-Myc tag mouse monoclonal antibody (Alexa Fluor® 488) ([ab202008](#)) was used as counterstain at 1/100 dilution. The nuclear counter stain is DAPI (blue).



Immunofluorescence analysis of Raji cells labelling HLA DMB with ab131273 at 1/250 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-HLA DMB antibody [EPR7982] (ab131273)

### 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 [EPR7982] (ab131273)

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

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