# abcam

## Product datasheet

## Anti-HLA DR + DP + DQ antibody [CR3/43] ab7856

★★★★★ 4 Abreviews 15 References 画像数 4

製品の概要

製品名 Anti-HLA DR + DP + DQ antibody [CR3/43]

製品の詳細 Mouse monoclonal [CR3/43] to HLA DR + DP + DQ

由来種 Mouse

特異性 The gene of the human histocompatibility complex class Il consists of at least four subregions:

HLA DP, DQ, and DR, containing a minimum of one alpha and one beta chain. This antibody

reacts with the beta-chain of all products of the gene subregions DP, DQ, and DR.

アプリケーション 適用あり: IHC-P, WB

種交差性 交差種: Human

免疫原 Tissue, cells or virus corresponding to Human HLA DR + DP + DQ. Raised against tonsil cells of

human origin

ポジティブ・コントロール IHC-P: Human tonsil tissue

特記事項

This antibody principally labels B cells, interdigitating reticulum cells, Langerhans' cells and

manymacrophages.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

**バッファー** pH: 7.40

Preservative: 0.1% Sodium azide

Constituent: PBS

精製度 Protein G purified

1

一次抗体 備考 This antibody principally labels B cells, interdigitating reticulum cells, Langerhans' cells and

manymacrophages.

ポリ/モノ モノクローナル

**クローン名** CR3/43

アイソタイプ lgG1

**軽鎖の種類** kappa

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab7856の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P	<b>★★★★★</b> (4)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/500. Detects a band of approximately 30 kDa (predicted molecular weight: 27 kDa).

#### ターゲット情報

#### 機能

Binds peptides derived from antigens that access the endocytic route of antigen presenting cells (APC) and presents them on the cell surface for recognition by the CD4 T-cells. The peptide binding cleft accomodates peptides of 10-30 residues. The peptides presented by MHC class II molecules are generated mostly by degradation of proteins that access the endocytic route, where they are processed by lysosomal proteases and other hydrolases. Exogenous antigens that have been endocytosed by the APC are thus readily available for presentation via MHC II molecules, and for this reason this antigen presentation pathway is usually referred to as exogenous. As membrane proteins on their way to degradation in lysosomes as part of their normal turn-over are also contained in the endosomal/lysosomal compartments, exogenous antigens must compete with those derived from endogenous components. Autophagy is also a source of endogenous peptides, autophagosomes constitutively fuse with MHC class II loading compartments. In addition to APCs, other cells of the gastrointestinal tract, such as epithelial cells, express MHC class II molecules and CD74 and act as APCs, which is an unusual trait of the GI tract. To produce a MHC class II molecule that presents an antigen, three MHC class II molecules (heterodimers of an alpha and a beta chain) associate with a CD74 trimer in the ER to form an heterononamer. Soon after the entry of this complex into the endosomal/lysosomal system where antigen processing occurs, CD74 undergoes a sequential degradation by various proteases, including CTSS and CTSL, leaving a small fragment termed CLIP (class-II-associated invariant chain peptide). The removal of CLIP is facilitated by HLA-DM via direct binding to the alpha-beta-CLIP complex so that CLIP is released. HLA-DM stabilizes MHC class II molecules until primary high affinity antigenic peptides are bound. The MHC II molecule bound to a peptide is then transported to the cell membrane surface. In B cells, the interaction between HLA-DM and MHC class II molecules is regulated by HLA-DO. Primary dendritic cells (DCs) also to express HLA-DO. Lysosomal miroenvironment has been implicated in the regulation of antigen loading into MHC II molecules, increased acidification produces increased proteolysis and efficient peptide

loading.

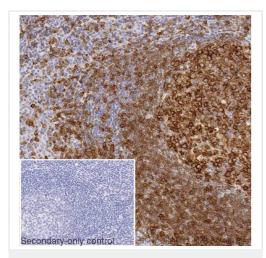
**配列類似性** Belongs to the MHC class II family.

Contains 1 lg-like C1-type (immunoglobulin-like) domain.

細胞内局在

Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus > trans-Golgi network membrane. Endosome membrane. Lysosome membrane. The MHC class II complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell membrane for antigen presentation.

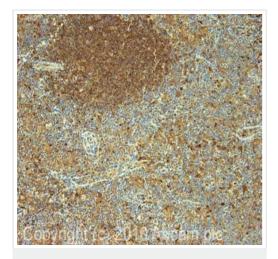
#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HLA DR + DP + DQ antibody [CR3/43] (ab7856)

IHC image of -HLA DR + DP + DQ staining in a section of formalin-fixed paraffin-embedded normal human tonsil\* performed on a Leica BOND<sup>TM</sup> system using the standard protocol **F**. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab7856, 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.

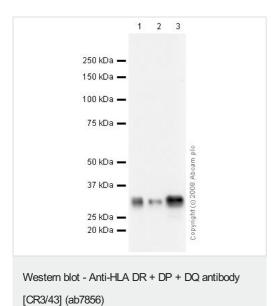
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HLA DR + DP + DQ antibody [CR3/43] (ab7856)

IHC image of ab7856 staining in human tonsil formalin fixed paraffin embedded tissue section, performed on a Leica Bond<sup>TM</sup> system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab7856, 1µg/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.

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.



**All lanes :** Anti-HLA DR + DP + DQ antibody [CR3/43] (ab7856) at 1/500 dilution

Lane 1 : U-87 MG (Human glioblastoma astrocytoma) Whole Cell Lysate

Lane 2: Human liver tissue lysate - total protein (ab29889)

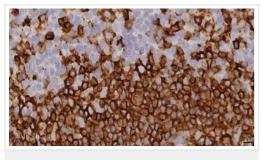
Lane 3: Lung (Human) Tissue Lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

**All lanes :** Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

**Predicted band size:** 27 kDa **Observed band size:** 30 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HLA DR + DP + DQ antibody [CR3/43] (ab7856)

This image is courtesy of an anonymous Abreview

Ab7856 staining HLA DR+DP+DQ in Human Colorectal tissue sections by Immunohistochemistry. Antigen retrieval was by heat mediation at pH6 for 20minutes. Samples were fixed with formaldehyde and blocked with 10% hydrogen peroxide for 5 minutes. Samples were incubated with primary antibody at 1/100 dilution for 15 minutes. HRP rabbit polyclonal polymer refine detection kit was used as the secondary antibody.

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