abcam

Product datasheet

Anti-HLA-DRB4 antibody [EPR7183] - BSA and Azide free ab248175

リコンビナント RabMAb

画像数 5

製品の概要

製品名	Anti-HLA-DRB4 antibody [EPR7183] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR7183] to HLA-DRB4 - BSA and Azide free
由来種	Rabbit
特異性	This antibody is predicted to cross-react with DRB1-16 beta chain, DRB1-15 beta chain, DRB1-13 beta chain, DRB1-12 beta chain, DRB1-11 beta chain, DRB1-10 beta chain, DRB1-8 beta chain, DRB1-3 beta chain and DRB1-1 beta chain.
アプリケーション	**適用あり:** IHC-P, WB **適用なし:** ICC/IF or IP
種交差性	**交差種:** Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
特記事項	ab248175 is the carrier-free version of **ab126767**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

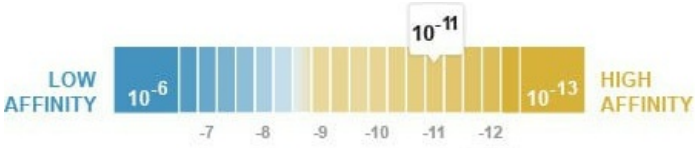
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

解離定数（K_D 値） $K_D = 5.50 \times 10^{-11}$ M



Learn more about K_D

バッファー pH: 7.2
Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPR7183

アイソタイプ IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab248175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		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 30 kDa.

追加情報 Is unsuitable for ICC/IF or IP.

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 Ig-like C1-type (immunoglobulin-like) domain.

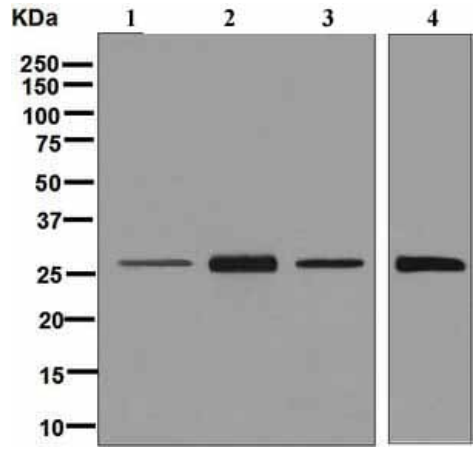
翻訳後修飾

Ubiquitinated by MARCH1 and MARCH8 at Lys-254 leading to sorting into the endosome system and down-regulation of MHC class II. When associated with ubiquitination of the alpha subunit of HLA-DR: HLA-DRA 'Lys-244', the down-regulation of MHC class II may be highly effective.

細胞内局在

Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus > trans-Golgi network membrane. Endosome membrane. Lysosome membrane. Late endosome 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



Western blot - Anti-HLA-DRB4 antibody [EPR7183] - BSA and Azide free (ab248175)

All lanes : Anti-HLA-DRB4 antibody [EPR7183] (**ab126767**) at 1/1000 dilution

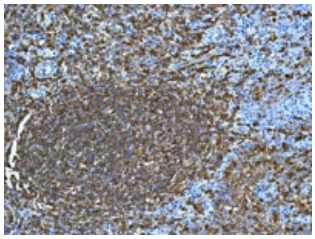
Lane 1 : Human fetal thymus tissue lysate
Lane 2 : Human lymph node tissue lysate
Lane 3 : Human tonsil tissue lysate
Lane 4 : Raji cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

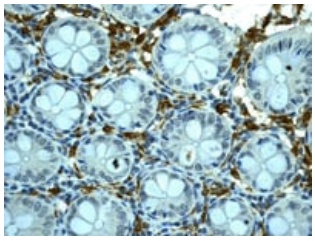
Predicted band size: 30 kDa

This data was developed using **ab126767**, the same antibody clone in a different buffer formulation.



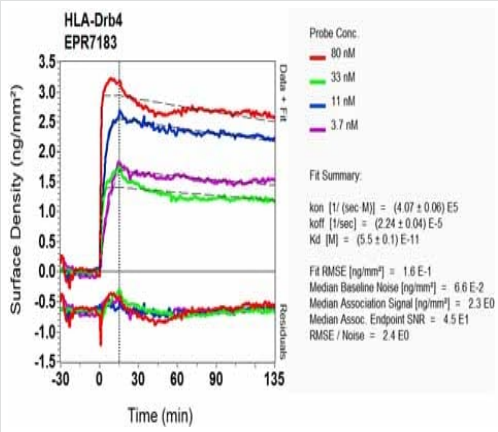
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HLA-DRB4 antibody [EPR7183] - BSA and Azide free (ab248175)

This data was developed using **ab126767**, the same antibody clone in a different buffer formulation.**ab126767**, at 1/100, staining HLA-DRB4 in Paraffin-embedded Human tonsil tissue by Immunohistochemistry. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HLA-DRB4 antibody [EPR7183] - BSA and Azide free (ab248175)

This data was developed using **ab126767**, the same antibody clone in a different buffer formulation.**ab126767**, at 1/100, staining HLA-DRB4 in Paraffin-embedded Human colon tissue by Immunohistochemistry. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



OI-RD Scanning - Anti-HLA-DRB4 antibody [EPR7183] - BSA and Azide free (ab248175)

This data was developed using **ab126767**, the same antibody clone in a different buffer formulation.Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

Anti-HLA-DRB4 antibody [EPR7183] - BSA and Azide free (ab248175)

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