

Anti-HLA-DP antibody [B7/21] - BSA and Azide free ab222780

1 Image

Overview

Product name	Anti-HLA-DP antibody [B7/21] - BSA and Azide free
Description	Mouse monoclonal [B7/21] to HLA-DP - BSA and Azide free
Host species	Mouse
Specificity	<p>The B7/21 monoclonal antibody specifically recognizes HLA-DP antigens which are human Major Histocompatibility Complex (MHC) Class II antigens. HLA-DP antigens are heterodimers comprised of two different type I transmembrane glycoproteins that are noncovalently-associated. The ~34 kDa HLA-DP alpha (HLA-DPα) and ~26-28 kDa HLA-DP beta (HLA-DPβ) chains are encoded by HLA-DPA1 and HLA-DPB1 genes, respectively, that are located within the Human Leukocyte Antigen (HLA) Complex of chromosome 6. The B7/21 antibody recognizes a monomorphic determinant present on cells expressing HLA-DP1, -DP2, -DP3, -DP4, and -DP5 and does not reportedly bind to HLA-DR or HLA-DQ Class II antigens. HLA-DP is variably expressed on B cells, monocytes, macrophages, dendritic cells (DC), activated T cells, and tumor cell lines including B cell lines, myelomas, and some myeloid leukemias. HLA-DP functions in the presentation of peptides derived from extracellular antigens to CD4+ T cells.</p>
Tested applications	Suitable for: ICC
Species reactivity	Reacts with: Human
Immunogen	The details of the immunogen for this antibody are not available.
General notes	<p>ab222780 is the carrier-free version of ab20897.</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the</p>

need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	B7/21
Isotype	IgG3

Applications

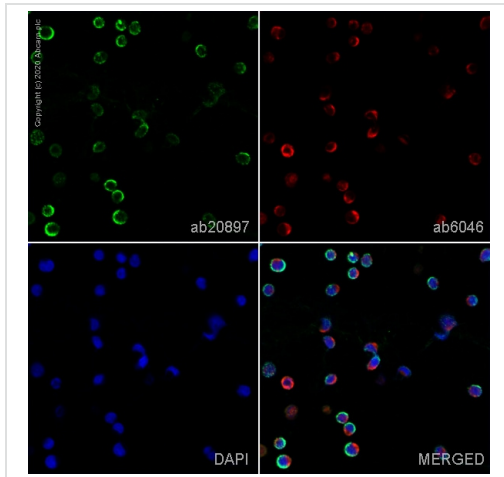
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab222780 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC		Use at an assay dependent concentration.

Target

Relevance	HLA-DPA1 belongs to the HLA class II alpha chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DPA) and a beta (DPB) chain, both anchored in the membrane. It plays a vital role in the immune system by presenting peptides derived from extracellular proteins. Class II molecules are expressed in antigen presenting cells (B lymphocytes, dendritic cells and macrophages). Within the DP molecule the alpha and beta chain contain the polymorphisms governing the peptide binding specificities, resulting in up to 4 different molecules.
Cellular localization	Type I membrane protein; Cell Membrane, Endoplasmic reticulum and Golgi Apparatus

Images



Immunocytochemistry - Anti-HLA-DP antibody [B7/21] - BSA and Azide free (ab222780)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab20897**)

ab20897 staining HLA-DP in RAMOS cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with **ab20897** at 5µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.

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