abcam

ab259258

Anti-HLA-DR antibody [HLA-Pan/2967R] - BSA and Azide free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing HLA-DRA protein. The exact immunogen used to generate this antibody is proprietary information. Database link P01903
Carrier free	Yes
Clone number	HLA-Pan/2967R
Purification technique	Affinity purification Protein A/G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from Bioreactor Concentrate.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	30 minutes at RT Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg for 10^6 Cells
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Protein Array

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Human

Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information HLA-DRA

Function

An alpha chain of antigen-presenting major histocompatibility complex class II (MHCII) molecule. In complex with the beta chain HLA-DRB, displays antigenic peptides on professional antigen presenting cells (APCs) for recognition by alpha-beta T cell receptor (TCR) on HLA-DR-restricted CD4-positive T cells. This guides antigen-specific T-helper effector functions, both antibody-mediated immune response and macrophage activation, to ultimately eliminate the infectious agents and transformed cells (PubMed:15265931, PubMed:15322540, PubMed:17334368, PubMed:22327072, PubMed:24190431, PubMed:27591323, PubMed:29884618, PubMed:31495665, PubMed:8145819, PubMed:9075930). Typically presents extracellular peptide antigens of 10 to 30 amino acids that arise from proteolysis of endocytosed antigens in lysosomes (PubMed:8145819). In the tumor microenvironment, presents antigenic peptides that are primarily generated in tumor-resident APCs likely via phagocytosis of apoptotic tumor cells or macropinocytosis of secreted tumor proteins (PubMed:31495665). Presents peptides derived from intracellular proteins that are trapped in autolysosomes after macroautophagy, a mechanism especially relevant for T cell selection in the thymus and central immune tolerance (PubMed:17182262, PubMed:23783831). The selection of the immunodominant epitopes follows two processing modes: 'bind first, cut/trim later' for pathogen-derived antigenic peptides and 'cut first, bind later' for autoantigens/self-peptides (PubMed:25413013). The anchor residue at position 1 of the peptide N-terminus, usually a large hydrophobic residue, is essential for high affinity interaction with MHCII molecules (PubMed:8145819).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

ab259258 is the carrier-free version of ab257320.
Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

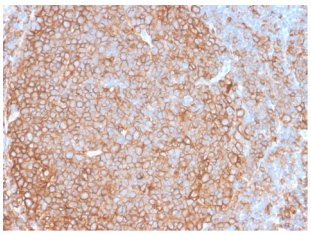
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

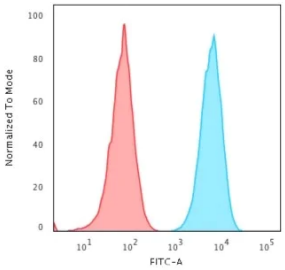
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HLA-DR antibody [HLA-Pan/2967R] - BSA and Azide free (ab259258)

HLA-DR Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-HLA-DR antibody

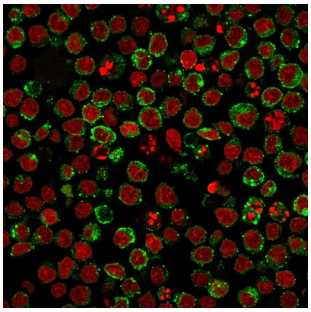
Immunohistochemical analysis of formalin fixed, paraffin-embedded human tonsil staining HLA-DR with ab257320 at 2µg/ml for 30 minutes at room temperature.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab257320).



Flow Cytometry - Anti-HLA-DR antibody [HLA-Pan/2967R] - BSA and Azide free (ab259258)

HLA-DR Flow Cytometry staining using rabbit Anti-HLA-DR antibody

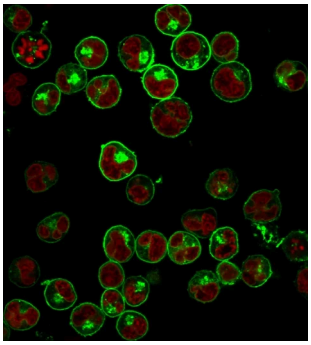
Flow Cytometric analysis of Raji cells staining HLA-DR with ab257320, followed by a goat anti-rabbit IgG-CF488 secondary antiobdy (blue). Isotype control (red).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab257320).



Immunocytochemistry/ Immunofluorescence - Anti-HLA-DR antibody [HLA-Pan/2967R] - BSA and Azide free (ab259258)

HLA-DR Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-HLA-DR antibody

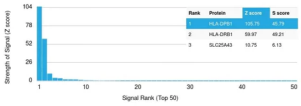
Immunocytochemistry/ Immunofluorescent analysis of Ramos cells staining HLA-DR with ab257320 at 2µg/ml, followed by a goat anti-rabbit IgG-CF488 secondary (blue) and an isotype control (red).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab257320).



Immunocytochemistry/ Immunofluorescence - Anti-HLA-DR antibody [HLA-Pan/2967R] - BSA and Azide free (ab259258)

HLA-DR Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-HLA-DR antibody

Immunocytochemistry/ Immunofluorescent analysis of Ramos cells staining HLA-DR with ab257320 at 2µg/ml, followed by a goat anti-rabbit IgG-CF488 secondary (green). Nuceli stained with reddot (red).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab257320).



Protein Array - Anti-HLA-DR antibody [HLA-Pan/2967R] - BSA and Azide free (ab259258)

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.