abcam

ab64676

PE Anti-HLA-DR antibody [MEM-267]

Anti-HLA-DR antibody [MEM-267] conjugated to PE - suitable for flow cytometry, and reacts with human samples. Clone [MEM-267] is a mouse monoclonal antibody cited in 2 publications.

Design your panel with our interactive flow cytometry panel builder. Click here.

Lab Essentials

Key facts

Isotype	IgG2b
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.097% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Human HLA-DRA. Database link P01903
Clone number	MEM-267
Purification technique	Size-exclusion chromatography
Specificity	Reacts with immature dendritic cells that express empty cell surface MHC molecules, but not cells that express predominantly peptide loaded forms; reacts specifically with the empty but not peptide-loaded form of HLA-DR1.
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	The purified antibody (>95% by SDS-PAGE) is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	9 mg/mL
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 conditions	+4°C

Appropriate long-term storage conditions	+4°C

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

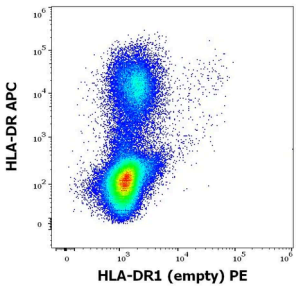
We do not recommend this combination. It is not covered by our product promise.

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.

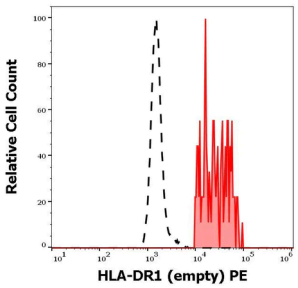
3 product images



Flow Cytometry - PE Anti-HLA-DR antibody [MEM-267] (ab64676)

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

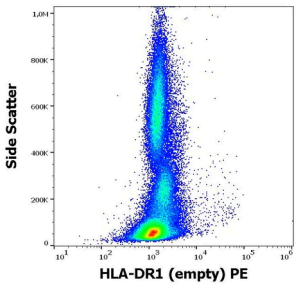
Flow cytometry multicolor surface staining pattern of human peripheral whole blood stained using ab64676 at 9 µg/ml and anti-human HLA-DR (APC antibody at 10 µl reagent / 100 µl of peripheral whole blood.



Flow Cytometry - PE Anti-HLA-DR antibody [MEM-267] (ab64676)

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

Separation of human HLA-DR1 (empty) positive HLA-DR positive cells (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using ab64676 at 9 µg/ml.



Flow Cytometry - PE Anti-HLA-DR antibody [MEM-267] (ab64676)

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

Flow cytometry surface staining pattern of human peripheral whole blood stained using ab64676 at 9 µg/ml.

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