

# HLA-DRB Monoclonal Mouse Antibody (L243)

## Product Description

This MAb reacts with the HLA-DRB1 antigen, a member of MHC class II molecules. It does not cross react with HLA-DP and HLA-DQ. It binds a conformational epitope on HLA-DR, which depends on the correct folding of the  $\alpha/\beta$  heterodimer. This MAb has been reported to block mixed lymphocyte reactions. The L243 antibody recognizes a different epitope than the LN3 monoclonal antibody, and these antibodies do not cross-block binding to each other's respective epitopes. HLA-DR is a heterodimeric cell surface glycoprotein comprised of a 36kD alpha (heavy) chain and a 28kD beta (light) chain. It is expressed on B-cells, activated T-cells, monocytes/macrophages, dendritic cells and other non-professional APCs. In conjunction with the CD3/TCR complex and CD4 molecules, HLA-DR is critical for efficient peptide presentation to CD4 T cells. It is an excellent histiocytic marker in paraffin sections producing intense staining. True histiocytic neoplasms are similarly positive. HLA-DR antigens also occur on a variety of epithelial cells and their corresponding neoplastic counterparts.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0458, Anti-HLA-DRB (L243)**

## Product attributes

<b>Antibody number</b>	#0458
<b>Antibody reactivity (target)</b>	HLA-DRB
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	L243
<b>Isotype</b>	IgG2a, kappa
<b>Molecular weight of antigen</b>	28 kDa (beta chain)
<b>Synonyms</b>	DRB1; HLA class II histocompatibility antigen; DR-1 beta chain; HLA-DR-beta 1; HLA-DRB1; human leucocyte antigen DRB1; Leucocyte antigen DR beta 1 chain; lymphocyte antigen DRB1; major histocompatibility complex; class II; DR beta 1; MHC class II HLA-DR beta 1 chain; MHC class II HLA-DR-beta cell surface glycoprotein
<b>Human gene symbol</b>	HLA-DRB1
<b>Entrez gene ID</b>	3123
<b>SwissProt</b>	P01911
<b>UniGene</b>	534322
<b>Immunogen</b>	Activated human peripheral blood mononuclear cells
<b>Antibody target cellular localization</b>	Plasma membrane
<b>Species reactivity</b>	Baboon, Chimpanzee, Dog, Human, Monkey, Squirrel
<b>Expected antibody applications</b>	ELISA (published for clone), Flow, surface (published for clone), Functional studies (published for clone), IHC (frozen) (published for clone), IP (published for clone)
<b>Antibody application notes</b>	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
<b>Positive control</b>	Ramos, Daudi or HuT78 cells. Tonsil or lymph node
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
<b>Antibody research areas</b>	Cancer, Immunology, MHC antigens
<b>Product origin</b>	Product may contain either bovine serum albumin (BSA) from bovine serum ( <i>Bos taurus</i> ), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF@405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF@405S Features</a>
BNC88	CF@488A	490/515	488	GFP, FITC	<a href="#">CF@488A Features</a>
BNC68	CF@568	562/583	532, 561	RFP, TRITC	<a href="#">CF@568 Features</a>
BNC94	CF@594	593/614	561	Texas Red®	<a href="#">CF@594 Features</a>
BNC40	CF@640R	642/662	633-640	Cy@5	<a href="#">CF@640R Features</a>
BNC47	CF@647	650/665	633-640	Cy@5	<a href="#">CF@647 Features</a>
BNC74	CF@740	742/767	633-685	775/50	<a href="#">CF@740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Nature (1983) 304: 358-361. (IP, Flow)
2. J Exp Med (2000) 191 (8): 1395-1412. (functional studies)
3. J Clin Pathol (1991) 44:102-106. (IHC, frozen)
4. Int J Cancer (2001) 93: 556-565. (ELISA, Flow, functional studies)

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Product link: <https://biotium.com/product/monoclonal-anti-hla-drb-l243/>

