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MHC-II Monoclonal Mouse Antibody (169-1B5.2)

Product Description

This antibody detects a monomorphic general framework determinant of HLA-DR Class II antigen. It does not cross react with HLA-DP and HLA-DQ. HLA-DR is a heterodimeric cell surface glycoprotein comprised of a 36 kDa alpha (heavy) chain and a 28 kDa 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 cytoplasmic 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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1096, Anti-MHC-II (169-1B5.2)

Product attributes

Antibody number	#1096
Antibody reactivity (target)	MHC-II
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	169-1B5.2
Isotype	IgG2b, kappa
Molecular weight of antigen	36 kDa (? chain) and 27 kDa (? chain)
Synonyms	Ia3; Ia-3; H-2Ea; H2-Ea; AI323765; I-Ealpha; E-alpha-f; MHC-H2-Ea
Human gene symbol	HLA-DRA
Entrez gene ID	3122
SwissProt	P01903
Unigene	520048
Immunogen	Human peripheral blood leukocytes
Antibody target cellular localization	Plasma membrane
Verified antibody applications	Flow (verified)
Species reactivity	Cat, Cow, Human
Expected antibody applications	IF (published for clone)
Antibody application notes	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
Positive control	Ramos, Daudi or HuT78 cells. Tonsil or lymph node
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	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
Antibody research areas	Immunology, MHC antigens
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), 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	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
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.

Nature Microbiol (2019) 4: 2035-2038. (IF)