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HLA-DQ / MHCII Recombinant Monoclonal Mouse Antibody (rSPV-L3)

Product Description

Recognizes a DQ antigen, which is a dimer of 60 kDa. The class II molecule is a heterodimer consisting of an alpha (DQA) and a beta chain (DQB), both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. Class II molecules are expressed in antigen presenting cells (APC: B Lymphocytes, dendritic cells, macrophages). The alpha chain is approximately 33-35 kDa. It is encoded by 5 exons; exon 1 encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, and exon 4 encodes the transmembrane domain and the cytoplasmic tail. Within the DQ molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to four different molecules. Typing for these polymorphisms is routinely done for bone marrow transplantation. This MAb strongly blocks cytotoxicity activity of T4-positive cytotoxic T cell clones.

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 3431, Anti-HLA-DQ|MHCII (rSPV-L3)

Product attributes

Antibody number	#3431
Antibody reactivity (target)	HLA-DQ, MHCII
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal, Recombinant Monoclonal
Clone	rSPV-L3
Isotype	IgG1, kappa
Molecular weight of antigen	60 kDa
Synonyms	CELIAC1; DC 4 alpha chain Gluten sensitive enteropathy (celiac disease) (GSE); HLA class II histocompatibility antigen DQ(1) alpha chain; HLA class II histocompatibility antigen DQ(3) alpha chain; IDDM1; Leucocyte antigen DQA1; Major histocompatibility complex class II DQ alpha 1 (HLA DQA1); Major histocompatibility complex class II DQ beta 1 (HLA DQB1); MHC class II antigen HLA DQ beta 1; MHC class II HLA DQ alpha 1; MHC class II HLA DQ beta glycoprotein
Human gene symbol	HLA-DQ
Entrez gene ID	3117; 3118; 3119
SwissProt	P01908; P01909; P01920
Unigene	550475
Immunogen	T4-positive CTL clone HG-38
Antibody target cellular localization	Plasma membrane
Species reactivity	Human, Pig
Expected antibody applications	Functional studies (published for clone), IP (published for clone), WB (published for clone)
Positive control	Raji cells. Tonsil or lymph node
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35°C, Store at 2 to 8 °C, Protect fluorescent conjugates from light
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
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
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.

1. Hybridoma (1983) 2(4):423-37. (functional studies)
2. Eur J Immunol (1984) 14: 299-304. (IP)
3. J Biol Chem (2010) 285(52): 40800-40808. (WB)