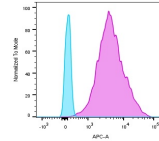


MHC-II Monoclonal Mouse Antibody (SPV-L3)



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.

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. (immunoprecipitation)
3. J Biol Chem (2010) 285(52): 40800-40808. (western)

Product attributes

Antibody number	#0200
Antibody reactivity (target)	MHC-II
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	SPV-L3
Isotype	IgG2a, kappa
Molecular weight	60 kDa
Synonyms	Ia3; Ia-3; H-2Ea; H2-Ea; A1323765; I-Ealpha; E-alpha-f; MHC-H2-Ea
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
Verified antibody applications	Flow (surface) (verified), IF (verified)
Species reactivity	Human, Pig
Expected antibody applications	Functional studies (published for clone), IP (published for clone), WB (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	Raji 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

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
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

Dye Features

[CF®405S Features](#)

[CF®488A Features](#)

[CF®568 Features](#)

[CF®594 Features](#)

[CF®640R Features](#)

[CF®647 Features](#)

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, LI-COR Bioscience.

This datasheet was generated on April 26, 2024 at 10:40:39 AM. Visit product page to check for updated information before use.

Product link: <https://biotium.com/product/monoclonal-anti-mhc-ii-hla-dq-spv-l3/>