

CD4 Mouse Anti-Human mAb FITC Conjugate

Store at 2°C to 8°C

Catalog Number A18647

Pub. No. MAN0008997 Rev. 2.0

Catalog No.	Form	Amount	Excitation	Peak Emission
A18647	FITC	25 tests	488 nm	519 nm
A27064	FITC	100 tests	488 nm	519 nm

Product description

The CD4 Mouse Anti-Human Monoclonal Antibody (mAb) reacts with human CD4, a 59 kDa protein which acts as a co-receptor for the T cell receptor (TCR) in its interaction with MHC Class II molecules on antigen-presenting cells. The extracellular domain of CD4 binds to the beta-2 domain of MHC Class II, while its cytoplasmic tail provides a binding site for the tyrosine kinase lck, facilitating the signaling cascade that initiates T cell activation. CD4, and co-receptors CCR5 and CXCR4, may also be utilized by HIV-1 to enter T cells. Human CD4 is typically expressed on thymocytes, some mature T cell populations such as Th17 and T regulatory (Treg) cells, as well as on dendritic cells. The OKT4 clone is widely used as a phenotypic marker for CD4 expression. It is cross-reactive with CD4 in several non-human species, including Chimpanzee, Cynomolgus and Rhesus. This antibody is compatible with the anti-human CD4 antibody RPA-T4 clone, as it recognizes a different epitope, and thus does not block binding of the RPA-T4 clone to CD4.

Product specifications

Clonality:	Monoclonal
Host/Class:	Mouse IgG
Reactivity:	Human CD4
Clone/PAD:	OKT4
Isotype:	IgG2bk
Lot:	See product label

Product applications

Applications reported for the CD4 Mouse Anti-Human mAb include Flow Cytometry.

Storage and handling

Store reagents at 2°C to 8°C. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted. Cells should be analyzed within 18 hours of staining for best results.

Avoid light exposure with fluorochrome-conjugated antibodies. Use dim light during handling, incubation with cells, and prior to analysis.

Stability

When stored as instructed, expires six months from date of receipt unless otherwise indicated on the Certificate of Analysis.

Storage buffer

Phosphate buffered saline (PBS) with 0.1% sodium azide.



CAUTION! Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at www.lifetechnologies.com/support.

Product documentation

To obtain a Certificate of Analysis or Safety Data Sheet (SDS), visit <http://www.lifetechnologies.com/support>.

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at www.lifetechnologies.com/termsandconditions. If you have any questions, please contact Life Technologies at www.lifetechnologies.com/support.

Related products

Product Name	Quantity	Catalog No.
AbC™ Anti-Mouse Bead Kit	1 kit	A10344
AbC™ Anti-Rat/Hamster Bead Kit	1 kit	A10389
FIX & PERM® Reagents (200 tests)	1 kit	GAS004

Product Name	Quantity	Catalog No.
Blue (UV excitation)	1 kit	L23105
Violet (405 nm excitation)	(200 assays)	L34955
Aqua (405 nm excitation)		L34957
Yellow (405 nm excitation)		L34959
Green (488 nm excitation)		L23101
Red (488 nm excitation)		L23102
Far-red (633/635 nm excitation)		L10210
Near-IR (633/635 nm excitation)		L10119

References

1. Chen CY, Huang D, Yao S, Halliday L, Zeng G, Wang RC and Chen ZW. 2012. J. Immunol. 188:4278-4288. (in vivo depletion - macaque)
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3. Ciczora Y, Callens N, Seron K, Rouille Y, and Dubuisson J. 2010. J. Gen. Virol. 91:404-414. (Immunofluorescence microscopy; Western Blot)
4. Nguyen V, Cao L, Lin JT, Hung N, Ritz A, Yu K, Jianu R, Ulin SP, Raphael BJ, Laidlaw DH, Brossay L, and Salomon AR. 2009. Mol. Cell. Proteomics. 8: 2418-2431. (in vitro activation)
5. daSilva LLP, Sougrat R, Burgos PV, Janvier K, Mattera R, and Bonifacino JS. 2009. J. Virol. 83: 6578-6590 (Immunoprecipitation)
6. Balla-Jhaghoorsingh S, Koopman G, Mooij P, Haaksma TGM, Teeuwssen VJP, Bontrop RE, and Heeney JL. 1999. J. Immunol. 162: 2308-2314. (Immunocytochemistry /Immunofluorescence microscopy – Chimpanzee)
7. Bour S, Boulerice F, and Wainberg MA. 1991. J. Virol. 65(12): 6387-6396. (Immunoprecipitation)
8. Watanabe M, Ringler DJ, Fultz PN, MacKey JJ, Boyson JE, Levine CG, and Letvin NL. 1991. J. Virol. 65: 3344-3348. (Flow cytometry – Chimpanzee)

Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

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