

CD8a Rat Anti-Mouse mAb PE-Cyanine5 Conjugate

Store at 2°C to 8°C

Catalog Number A18702

Pub. No. MAN0009065 Rev. 2.0

Catalog No.	Form	Amount	Excitation	Peak Emission
A18702	PE-Cyanine5	25 µg	488 nm	670 nm

Product description

The CD8a Rat Anti-Mouse Monoclonal Antibody (mAb) reacts with the 32–34 kDa alpha subunit of mouse CD8, known as CD8 alpha (CD8a). CD8a can form a homodimer (CD8 alpha-alpha), but is more commonly expressed as a heterodimer with a CD8 beta chain. CD8 acts as a co-receptor in antigen recognition and subsequent T cell activation that is initiated upon binding of the T cell receptor (TCR) to antigen-bearing MHC Class I molecules. The cytoplasmic domains of CD8 provide binding sites for the tyrosine kinase lck, facilitating intracellular signaling events that lead to T cell activation, development, and cytotoxic effector functions. CD8+ cytotoxic T cells (CTLs) play an important role in inducing cell death of tumor cells, as well as cells infected by virus, bacteria or parasites. The 53-6.7 clone is widely used as a phenotypic marker for mouse CD8a expression on cytotoxic T cells, thymocytes, as well as on certain cell types that do not also express the TCR, including some NK cells and lymphoid dendritic cells.

Product specifications

Clonality:	Monoclonal
Host/Class:	Rat IgG
Reactivity:	Mouse CD8a
Clone/PAD:	53-6.7
Isotype:	IgG2ak
Lot:	See product label

Product applications

Applications reported for the CD8a Rat Anti-Mouse mAb include flow cytometry¹, cell depletion^{3,5,6}, immunoprecipitation⁷, and immunohistochemistry (frozen tissue)^{2,4}.

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. Willinger T and Flavell RA. 2012. *Proc. Natl. Acad. Sci.* 109:8670-8675.
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3. Mochimaru H, Usui T, Yaguchi T, Nagahama Y, Hasegawa G, Usui Y, Shimmura S, Tsubota K, Amano S, Kawakami Y, and Ishida S. 2008. *Invest. Ophthalmol. Vis. Sci.* 49(5):2172-2127.
4. Fan K, Zhou M, Pathak MK, Lindner DJ, Altuntas CZ, Touhy VK, Borden EC, and Yi T. 2005. *J. Immunol.* 175:7003-7008.
5. Nutt SL, Metcalf D, D'Amico A, Polli M, and Wu L. 2005. *J. Exp. Med.* 201:221-231.
6. Fan G-C, and Singh, RR. 2002. *J. Exp. Med.* 196: 731-741.
7. Bosselut R, Zhang W, Ashe JM, Kopacz JL, Samelson LE, and Singer A. 1999. *J. Exp. Med.* 190: 1517-1526.

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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