

# CD8a Rat Anti-Mouse mAb PE Conjugate

Store at 2°C to 8°C

Catalog Number A18689

Pub. No. MAN0009041 Rev. 2.0

Catalog No.	Form	Amount	Excitation	Peak Emission
A18689	PE	25 µg	496 nm	578 nm
A27091	PE	100 µg	496 nm	578 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 induced by 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 and facilitate 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 in tumor cells, as well as in cells infected by virus, bacteria or parasites. The 2.43 clone is widely used as a phenotypic marker for mouse CD8 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

<b>Clonality:</b>	Monoclonal
<b>Host/Class:</b>	Rat IgG
<b>Reactivity:</b>	Mouse CD8a
<b>Clone/PAD:</b>	2.43
<b>Isotype:</b>	IgG2b
<b>Lot:</b>	See product label

## Product applications

Applications reported for the CD8a Rat Anti-Mouse 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](http://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

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## 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. Lin J-S, Szaba FM, Kummer LW, Chromy BA, and Smiley ST. 2011. J. Immunol. 187: 897-904. (in vivo depletion)
2. Wozniak KL, Young ML, and Wormley FL. 2011. Clin. Vaccine Immunol. 18(5):717-723. (in vivo depletion)
3. Hufford MM, Kim TS, Sun J, and Braciale TJ. 2011. J. Exp. Med. 208: 167-180 (in vivo depletion)
4. Ou R, Zhang M, Huang L, Flavell RA, Koni PA, and Moskophidis D. 2008. J. Virol. 82:2952-2965. (Immunohistochemistry – OCT embedded frozen tissue)
5. Bosselut R, Zhang W, Ashe JM, Kopacz JL, Samelson LE, and Singer A. 1999. J. Exp. Med. 190: 1517-1526. (in vitro activation)
6. Davies A, Kalb, S, Liang B, Aldrich CJ, Lemonnier FA, Jiang H, Cotter R, and Soloski MJ. 2003. J. Immunol. 170: 5027-5033. (Blocking)

## 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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