



# Rat Anti-Mouse CD8α Monoclonal antibody, clone 2.43 (CABT-L4316)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>   | The 2.43 monoclonal antibody reacts with mouse CD8α. The CD8 antigen is a transmembrane glycoprotein that acts as a co-receptor for the T cell receptor (TCR). |
| <b>Target</b>             | Mouse CD8α                                                                                                                                                     |
| <b>Immunogen</b>          | Mouse CTL clone L3                                                                                                                                             |
| <b>Isotype</b>            | IgG2b, κ                                                                                                                                                       |
| <b>Source/Host</b>        | Rat                                                                                                                                                            |
| <b>Species Reactivity</b> | Mouse                                                                                                                                                          |
| <b>Clone</b>              | 2.43                                                                                                                                                           |
| <b>Purification</b>       | Protein G purified.<br>Purity>95%. Determined by SDS-PAGE                                                                                                      |
| <b>Conjugate</b>          | Functional Grade                                                                                                                                               |
| <b>Applications</b>       | in vivo CD8+ T cell depletion, WB                                                                                                                              |
| <b>Molecular Weight</b>   | 150 kDa                                                                                                                                                        |
| <b>Format</b>             | 0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility                                                                    |
| <b>Concentration</b>      | Lot specific                                                                                                                                                   |
| <b>Size</b>               | 5 mg                                                                                                                                                           |
| <b>Buffer</b>             | PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]                                                                              |

Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay  
Related dilution buffer: CABT-LB04

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|---------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Preservative</b> | None                                                                                                                    |
| <b>Storage</b>      | The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze. |
| <b>Ship</b>         | Wet ice                                                                                                                 |

## BACKGROUND

**Introduction** The 2.43 monoclonal antibody reacts with mouse CD8α. The CD8 antigen is a transmembrane glycoprotein that acts as a co-receptor for the T cell receptor (TCR). Like the TCR, CD8 binds to class I MHC molecules displayed by antigen presenting cells (APC). CD8 is primarily expressed on the surface of cytotoxic T cells, but can also be found on thymocytes, natural killer cells, and some dendritic cell subsets. CD8 most commonly exists as a heterodimer composed of one CD8α and one CD8β chain however, it can also exist as a homodimer composed of two CD8α chains. Both the CD8α and CD8β chains share significant homology to immunoglobulin variable light chains. The molecular weight of each CD8 chain is approximately 34 kDa. The 2.43 antibody exhibits depleting activity when used in vivo.

**Keywords** CD8A;CD8a molecule;T-cell surface glycoprotein CD8 alpha chain;CD8 antigen, alpha polypeptide (p32);

## GENE INFORMATION

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| <b>Official Symbol</b> | CD8a molecule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>        | CD8A; CD8a molecule; T-cell surface glycoprotein CD8 alpha chain; CD8 antigen, alpha polypeptide (p32);                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>References</b>      | Balogh, K. N., et al. (2018). "Macrophage Migration Inhibitory Factor protects cancer cells from immunogenic cell death and impairs anti-tumor immune responses." PLoS One 13(6): e0197702. PubMed;DeBerge, M. P., et al. (2014). "Soluble, but not transmembrane, TNF-alpha is required during influenza infection to limit the magnitude of immune responses and the extent of immunopathology." J Immunol 192(12): 5839-5851. PubMed;Deng, L., et al. (2014). "Irradiation and anti-PD-L1 treatment synergistically promote antitumor immunity in mice." J Clin Invest 124(2): 687-695. PubMed;Vegran, F., et al. (2014). "The transcription factor IRF1 dictates the IL-21-dependent anticancer functions of TH9 cells." Nat Immunol 15(8): 758-766. PubMed;Van der Jeught, K., et al. (2014). "Intratumoral administration of mRNA encoding a fusokine consisting of IFN-beta and the ectodomain of the TGF-beta receptor II potentiates antitumor immunity." Oncotarget 5(20): 10100-10113. PubMed |