

# CD8a Monoclonal Antibody (53-6.7), PE-Cyanine5, eBioscience™

| Product Details    |                                    |
|--------------------|------------------------------------|
| Size               | 100 µg                             |
| Species reactivity | Mouse                              |
| Published species  | Human, Mouse                       |
| Host / Isotype     | Rat / IgG2a, kappa                 |
| Class              | Monoclonal                         |
| Type               | Antibody                           |
| Clone              | 53-6.7                             |
| Conjugate          | PE-Cyanine5                        |
| Form               | Liquid                             |
| Concentration      | 0.2 mg/mL                          |
| Purification       | Affinity chromatography            |
| Storage buffer     | PBS, pH 7.2                        |
| Contains           | 0.09% sodium azide                 |
| Storage conditions | 4°C, store in dark, DO NOT FREEZE! |
| RRID               | AB_468706                          |

| Applications                  | Tested Dilution | Publications    |
|-------------------------------|-----------------|-----------------|
| Flow Cytometry (Flow)         | 0.125 µg/test   | 56 Publications |
| Functional Assay (Functional) | -               | 2 Publications  |
| In vitro Assay (IV)           | -               | 1 Publication   |

## Product Specific Information

**Description:** The 53-6.7 monoclonal antibody reacts with the mouse CD8a molecule. CD8a is an approximately 32-34 kDa cell surface receptor expressed either as a heterodimer with the CD8 beta chain (CD8 alpha beta) or as a homodimer (CD8 alpha alpha). A majority of thymocytes and a subpopulation of mature alpha beta TCR T cells express CD8 alpha beta while gamma delta TCR T cells, a subpopulation of intestinal intraepithelial lymphocytes (IELs) and dendritic cells express CD8 alpha alpha. CD8 binds to MHC class I and through its association with protein tyrosine kinase p56lck plays a role in T cell development and activation of mature T cells.

**Applications Reported:** The 53-6.7 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** The 53-6.7 antibody has been tested by flow cytometric analysis of mouse thymocyte or splenocyte suspensions. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Light sensitivity:** This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

**Fixation:** Samples can be stored in IC Fixation Buffer ([Product # 00-822-49](#)) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution ([Product # 00-5333-54](#)) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

**Excitation:** 488-561 nm; **Emission:** 667 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

**Filtration:** 0.2 µm post-manufacturing filtered.

Visit [thermofisher.com](http://thermofisher.com) to view references and figures.

Products are under warranty for one year from the date of shipment unless otherwise stated on this document or the product label.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.