SONY

Product Data Sheet

PerCP anti-mouse CD8a

Catalog # / Size: 1103655 / 25 µg
1103660 / 100 µg

Clone: 53-6.7

Isotype: Rat IgG2a, κ

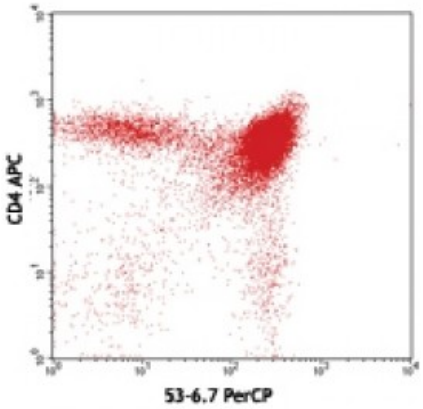
Immunogen: Mouse thymus or spleen

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with PerCP under optimal conditions. The solution is free of unconjugated PerCP and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2



C57BL/6 thymocytes were stained with CD8 (clone 53-6.7) PerCP and CD4 APC.

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 microg per 10^6 cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP has a maximum absorption of 482 nm and a maximum emission of 675 nm.

Application Notes: Clone 53-6.7 antibody competes with clone 5H10-1 antibody for binding to thymocytes3. The 53-6.7 antibody has been reported to block antigen presentation via MHC class I and inhibit T cell responses to IL-2. This antibody has also been used for depletion of $CD8a^+$ cells. Additional reported applications (for the relevant formats) include: immunoprecipitation[1,3], *in vivo* and *in vitro* cell depletion[2,10,15], inhibition of CD8 T cell proliferation3, blocking of cytotoxicity[3,4], and immunohistochemical staining[5,6] of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections. Clone 53-6.7 is not recommended for immunohistochemistry of formalin-fixed paraffin sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 100716). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 100746) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

Application References:

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29. Brenndorfer ED, *et al.* 2014.*J. Immunol.* 192:1671. PubMed
30. Byrne KT, *et al.* 2014. *J Immunol.* 192:1433.

Description: CD8, also known as Lyt-2, Ly-2, or T8, consists of disulfide-linked α and β chains that form the α(CD8a)/β(CD8b) heterodimer and α/α homodimer. CD8a is a 34 kD protein that belongs to the immunoglobulin family. The CD8 α/β heterodimer is expressed on the surface of most thymocytes and a subset of mature TCR α/β T cells. CD8 expression on mature T cells is non-overlapping with CD4. The CD8 α/α homodimer is expressed on a subset of γ/δ TCR-bearing T cells, NK cells, intestinal intraepithelial lymphocytes, and lymphoid dendritic cells. CD8 is an antigen co-receptor on T cells that interacts with MHC class I on antigen-presenting cells or epithelial cells. CD8 promotes T cell activation through its association with the TCR complex and protein tyrosine kinase lck.

Antigen References:

1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Zamoyska R. 1994. *Immunity* 1:243.
3. Ellmeier W, *et al.* 1999. *Annu. Rev. Immunol.* 17:523.