SONY

Product Data Sheet

FITC anti-mouse CD8a

Catalog # / Size: 1104015 / 50 µg
1104020 / 500 µg

Clone: 5H10-1

Isotype: Rat IgG2b, λ

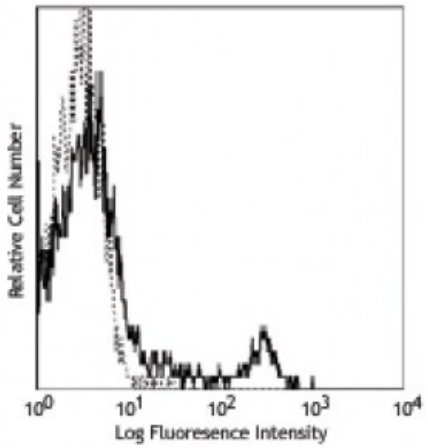
Immunogen: Concanavalin A-stimulated BALB/c splenic T cells

Reactivity: Mouse

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

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

Concentration: 0.5



C57BL/6 mouse splenocytes stained with 5H10-1 FITC

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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: partial inhibition of T-cell responses to IL-2 and cytotoxic induction of splenic T cells1, and immunohistochemistry2 of acetone-fixed frozen sections. The 5H10-1 antibody competes with 53-6.7 antibody (Cat. No. 100702) for binding to thymocytes1.

Clone 5H10-1 is not recommended for immunohistochemistry of formalin-fixed paraffin sections.

Application References:

1. Takahashi K, *et al.* 1992. *P. Natl. Acad. Sci. USA* 89:5557.
2. Frei K, *et al.* 1997. *J. Exp. Med.* 185:2177.
3. Korrer MJ, *et al.* 2014. *PLoS One.* 9:91370. PubMed
4. Nakajima A, *et al.* 2014. *PLoS One.* 9:105904. PubMed

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 34kD 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.