

Purified anti-mouse CD8a

Catalog # / Size: 1104010 / 500 µg
1104005 / 50 µg

Clone: 5H10-1

Isotype: Rat IgG2b, λ

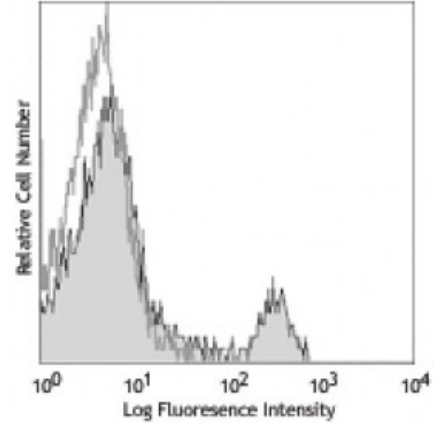
Immunogen: Concanavalin A-stimulated BALB/c splenic T cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography.

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

Concentration: 0.5



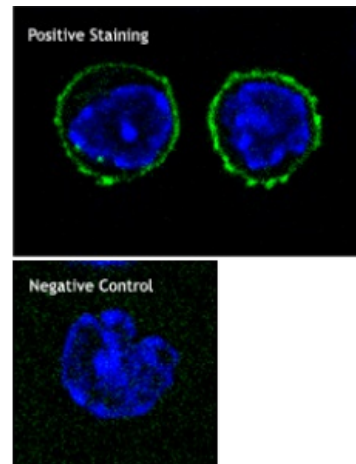
C57BL/6 mouse splenocytes stained with purified 5H10-1, followed by anti-rat IgGs-FITC

Applications:

Applications: Flow Cytometry, Immunohistochemistry

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 10⁶ 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, immunohistochemistry of acetone-fixed frozen sections², and immunofluorescence. The 5H10-1 antibody competes with 53-6.7 antibody (Cat. No. 100702) for binding to thymocytes¹.



Mouse OT-I primary CTL cells were stained with purified anti-mouse CD8a primary antibody at 1:50 dilution in PBS/1%NGS incubated O/N at 4°C, detected with anti-rat IgG2b FITC at 1:2000 dilution for 1hr at room temperature (green), plus DAPI staining f

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.

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.