TECHNICAL DATA SHEET

PE Anti-Mouse CD8a (2.43)

Catalog Number: 50-1886

PRODUCT INFORMATION

Contents: PE Anti-Mouse CD8a (2.43)

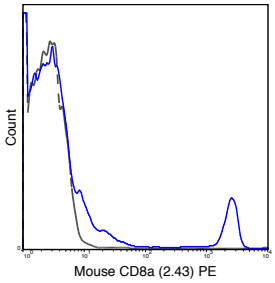
Isotype: Rat IgG2b

Concentration: 0.2 mg/mL

Clone: 2.43

Reactivity: Mouse

Formulation: 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with 0.125 ug Anti-Mouse C8a PE (50-1886) (solid line) or 0.125 ug Rat IgG2b PE isotype control (dashed line).

DESCRIPTION

The 2.43 antibody reacts with the 32-34 kDa alpha subunit of mouse CD8, known as CD8a or CD8 alpha. CD8a can form a homodimer (CD8 alpha-alpha), but is more commonly expressed as a heterodimer with a second chain known as CD8b or CD8 beta. CD8 acts as a co-receptor in antigen recognition and subsequent T cell activation induced by binding of the T cell receptor (TCR) to antigen-bearing MHC Class I molecules. The cytoplasmic domains of CD8 provide binding sites for the tyrosine kinase lck and facilitate intracellular signaling events that lead to T cell activation, development, and cytotoxic effector functions. CD8+ cytotoxic T cells (CTLs) play an important role in inducing cell death of tumor cells, as well as cells infected by virus, bacteria or parasites.The 2.43 antibody is widely used as a phenotypic marker for mouse CD8 on cytotoxic T cells, thymocytes, as well as on certain cell types that do not also express the TCR, including some NK cells and lymphoid dendritic cells.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

REFERENCES

Lin J-S, Szaba FM, Kummer LW, Chromy BA, and Smiley ST. 2011. J. Immunol. 187: 897-904. (in vivo depletion). Wozniak KL, Young ML, and Wormley FL. 2011. Clin. Vaccine Immunol. 18(5):717-723. (in vivo depletion). Hufford MM, Kim TS, Sun J, and Braciale TJ. 2011. J. Exp. Med. 208: 167-180 (in vivo depletion). Ou R, zhang M, Huang L, Flavell RA, Koni PA, and Moskophidis D. 2008. J. Virol. 82:2952-2965. (Immunohistochemistry – OCT embedded frozen tissue). Bosselut R, Zhang W, Ashe JM, Kopacz JL, Samelson LE, and Singer A. 1999. J. Exp. Med. 190: 1517-1526. (in vitro activation). Davies A, Kalb, S, Liang B, Aldrich CJ, Lemonnier FA, Jiang H, Cotter R, and Soloski MJ. 2003. J. Immunol. 170: 5027-5033. (Blocking).