

TECHNICAL DATA SHEET

Purified Anti-Mouse CD8a (2.43)

Catalog Number: 70-1886

PRODUCT INFORMATION

Contents: Purified Anti-Mouse CD8a (2.43)

Isotype: Rat IgG2b

Concentration: 0.5 mg/mL

Clone: 2.43

Reactivity: Mouse

Use By: 12 months from date of receipt

Storage Conditions: 2-8°C

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃, pH 7.2

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 in tumor cells, as well as in 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 preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready™ (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

APPLICATION NOTES

This purified format is guaranteed to be >90% pure as determined by SDS-PAGE analysis. Citations are provided as a convenience to you - please consult Materials and Methods sections for additional details about the use of any product in these publications.

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)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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