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Datasheet for 200-508-N78

CD8a Phycoerythrin Antibody

Overview

Description:	Anti-CD8a (RAT) Phycoerythrin Conjugated Monoclonal Antibody - 200-508-N78
Item No.:	200-508-N78
Size:	100 µg
Applications:	FC
Reactivity:	Mouse
Host Species:	Rat

Product Details

Background:	CD8a 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.
Synonyms:	T-cell surface glycoprotein CD8 alpha chain, T-cell surface glycoprotein Lyt-2, CD8a, Cd8a, Lyt-2, Lyt2
Host Species:	Rat
Conjugate:	R-Phycoerythrin (RPE)
Clonality:	Monoclonal
Clone ID:	2.43
Format:	IgG2b
F/P Ratio:	1-2

Target Details

Gene Name:	Cd8a
Reactivity:	Mouse
Immunogen:	Anti-CD8a Antibody (Monoclonal) was produced by repeated immunizations with CD8a antigen.
Purity/Specificity:	Phycoerythrin conjugated CD8a Monoclonal Antibody was purified from tissue culture supernatant via affinity chromatography and is directed against mouse CD8a. Cross reactivity with CD8a from other sources has not been tested. Anti-CD8a is conjugated with PE under optimal conditions and the solution is free of unconjugated PE.
Relevant Links:	• UniProtKB - P01731 • NCBI - NP_001074579.1 • GeneID - 12525

Application Details

Tested Applications:	FC
Application Note:	Anti-CD8a is tested for FLOW and useful for Immunohistochemistry using mouse spleen cells, or an appropriate cell type (where indicated). Researchers should determine optimal titers for applications that are not stated.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	10 µL/10^6 cells (0.1 µg)
IHC:	User Optimized

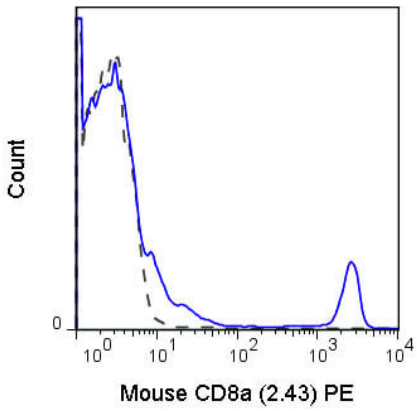
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.2 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	0.1% Gelatin

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C prior to opening. Dilute only prior to immediate use. This product is stable at 4° C as an undiluted liquid. Use subdued lighting during handling and incubation of cells prior to analysis. Store reagent in the dark. DO NOT FREEZE.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



Flow Cytometry
Flow Cytometry of anti-CD8a Phycoerythrin Conjugated Monoclonal Antibody. Cells: C57Bl/6 mouse splenocytes. Stimulation: none. Antibody: (Dotted Line) PE Rat IgG2b isotype control; (Solid Line) Phycoerythrin Anti-CD8a antibody using 0.125 ug.

Disclaimer

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