

Technical Data Sheet

Biotin Anti-Mouse CD8a

Catalog Number: 201003, 201004

Size: 25 ug, 100 ug

Target Name: CD8, CD8 alpha, T8, Lyt2, Ly-2

Regulatory Status: RUO

Product Details

Clone: 53-6.7

Application: FC

Reactivity: Mouse

Format: Biotin

Isotype: Rat IgG2a

Antibody Type: Monoclonal

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA

Protein Concentration: 0.2 mg/mL

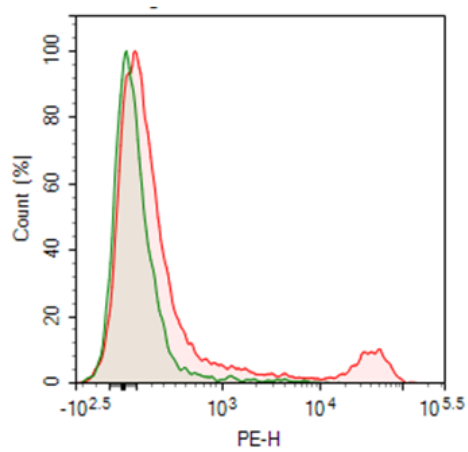
Storage and Handling: The antibody solution should be stored between 2°C and 8°C

Recommended Usage: For flow cytometric staining, it is recommended to use less than 0.05 ug of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application.

Background Information

CD8, also known as Lyt-2, Ly-2, or T8, is a cell surface glycoprotein that functions as a co-receptor for antigen recognition and T cell activation. It is typically expressed as a disulfide-linked heterodimer of CD8 α and CD8 β (CD8 $\alpha\beta$), though CD8 α can also form homodimers (CD8 $\alpha\alpha$). The CD8 α chain is an approximately 32–34 kDa protein of the immunoglobulin superfamily. CD8 $\alpha\beta$ heterodimers are expressed on most thymocytes and a subset of mature TCR $\alpha\beta$ T cells, while CD8 $\alpha\alpha$ homodimers are found on subsets of $\gamma\delta$ T cells, intestinal intraepithelial lymphocytes (IELs), NK cells, and some dendritic cells. CD8 binds to MHC class I molecules on antigen-presenting or target cells and, through its cytoplasmic domain association with the tyrosine kinase p56^{lck}, facilitates intracellular signaling events essential for T cell development, activation, and cytotoxic effector function. CD8⁺ cytotoxic T lymphocytes (CTLs) play a key role in eliminating virus-infected cells, tumor cells, and cells infected by intracellular pathogens.

Product Data



Mouse splenocytes stained with Biotin Anti-mouse CD8a clone 53-6.7 (red histogram) or an isotype control (green histogram), followed by SA-PE.