

# violetFluor™ 450 Anti-Human CD8 (SK1) Antibody

**Catalog # ATB10435** 

#### **Specification**

#### violetFluor™ 450 Anti-Human CD8 (SK1) Antibody - Product Information

Application FC

 $\begin{array}{ll} \text{Isotype} & \textbf{Mouse IgG1, kappa} \\ \text{Concentration} & \textbf{5} \ \mu \textbf{L} \ (\textbf{0.125} \ \mu \textbf{g})/\text{test} \end{array}$ 

Reactivity Human

Formulation 10mM NaH2PO4, 150 mM NaCl, 0.09%

NaN3,0.1%gelatin,pH7.2 0.1% gelatin,

pH7.2

## violetFluor™ 450 Anti-Human CD8 (SK1) Antibody - Additional Information

Gene ID 925
Gene Name CD8A

Alternative Name(s) CD8 alpha, leu-2a

Format violetFluor™ 450

**Storage Conditions** 2-8°C protected from light

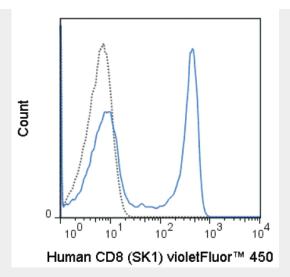
#### violetFluor™ 450 Anti-Human CD8 (SK1) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## violetFluor™ 450 Anti-Human CD8 (SK1) Antibody - Images





Human peripheral blood lymphocytes were stained with 5 uL (0.125 ug) violetFluor<sup>™</sup> 450 Anti-Human CD8 (ATB10435) (solid line) or 0.125 ug violetFluor<sup>™</sup> 450 Mouse IgG1 isotype control (dashed line).

# violetFluor™ 450 Anti-Human CD8 (SK1) Antibody - Background

The SK1 antibody is specific for the 32-34 kDa alpha chain of human 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 for antigen recognition and subsequent T cell activation that is initiated upon 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, facilitating 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 SK1 antibody is widely used as a phenotypic marker for 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. It is cross-reactive with CD8 in several non-human species, including Baboon, Chimpanzee, Cynomolgus and Rhesus. If used together with an alternative Anti-Human CD8a clone, RPA-T8, the SK1 antibody will not block binding of RPA-T8 to CD8a.