

**violetFluor™ 450 Anti-Human CD8a (OKT8) Antibody**  
**Catalog # ATB10345****Specification**

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**violetFluor™ 450 Anti-Human CD8a (OKT8) Antibody - Product Information**

Application	FC
Isotype	Mouse IgG2a
Concentration	5 uL (0.125 ug)/test
Reactivity	Human
Formulation	10 mM NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, 0.09% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , 0.1% gelatin, pH7.2

**violetFluor™ 450 Anti-Human CD8a (OKT8) Antibody - Additional Information****Format**

violetFluor™ 450

**Preparation**

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 antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10<sup>5</sup> to 1x10<sup>8</sup> cells. violetFluor™ 450 dye is excited by the violet (405 nm) laser and has a peak emission of 450 nm. The most common band pass filters for this dye are 440/40 or 450/50. violetFluor™ 450 can be used as an alternative for Pacific Blue®, BD Horizon™ V450 or eFluor® 450.

**Storage Conditions**

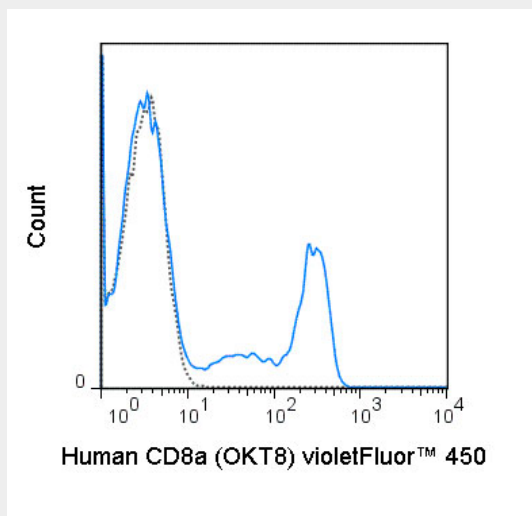
2-8°C protected from light

**violetFluor™ 450 Anti-Human CD8a (OKT8) Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## violetFluor™ 450 Anti-Human CD8a (OKT8) Antibody - Images



Human peripheral blood lymphocytes were stained with 5 uL (0.125 ug) violetFluor™ 450 Anti-Human CD8a (ATB10345) (solid line) or 0.125 ug violetFluor™ 450 Mouse IgG2a isotype control (dashed line).

## violetFluor™ 450 Anti-Human CD8a (OKT8) Antibody - Background

The OKT8 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 OKT8 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. If used together with alternative antibodies Anti-Human CD8a clone RPA-T8 or Anti-Human CD8a clone Hit8a, the OKT8 antibody will not block binding of RPA-T8 or Hit8a.