

**CD8 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1008a**

**Specification**

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**CD8 Antibody - Product Information**

Application	FC
Primary Accession	<a href="#">P01732</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

**Description**

CD8 T cell surface antigen is heterodimer of an alpha and a beta chain linked by two disulfide bonds .It belongs type I membrane protein. Selectively expressing of CD8 on a subset of T cells leads to CD8 T cell development. Through identifying cytotoxic/suppressor T-cells that interact with MHC class I bearing targets, CD8 is thought to play a role in the process of T-cell mediated killing. Veillette et al (1988) found the CD8 is associated with the internal membrane tyrosine-protein kinase p56lck.

**Immunogen**

Purified recombinant fragment of human CD8 expressed in E. Coli.

**Formulation**

Purified antibody in PBS containing 0.03% sodium azide.

**CD8 Antibody - Additional Information**

**Gene ID** 925

**Other Names**

T-cell surface glycoprotein CD8 alpha chain, T-lymphocyte differentiation antigen T8/Leu-2, CD8a, CD8A, MAL

**Dilution**

FC~~1/200 - 1/400

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CD8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**CD8 Antibody - Protein Information**

**Name** CD8A

## Synonyms MAL

### Function

Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class I molecule:peptide complex. The antigens presented by class I peptides are derived from cytosolic proteins while class II derived from extracellular proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class I proteins presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T- lymphocytes (CTLs). This mechanism enables CTLs to recognize and eliminate infected cells and tumor cells. In NK-cells, the presence of CD8A homodimers at the cell surface provides a survival mechanism allowing conjugation and lysis of multiple target cells. CD8A homodimer molecules also promote the survival and differentiation of activated lymphocytes into memory CD8 T-cells.

### Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein Note=CD8A localizes to lipid rafts only when associated with its partner CD8B.

### Tissue Location

CD8 on thymus-derived T-cells usually consists of a disulfide-linked alpha/CD8A and a beta/CD8B chain. Less frequently, CD8 can be expressed as a CD8A homodimer. A subset of natural killer cells, memory T-cells, intraepithelial lymphocytes, monocytes and dendritic cells expresses CD8A homodimers. Expressed at the cell surface of plasmacytoid dendritic cells upon herpes simplex virus-1 stimulation

## CD8 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](#)

## CD8 Antibody - Images



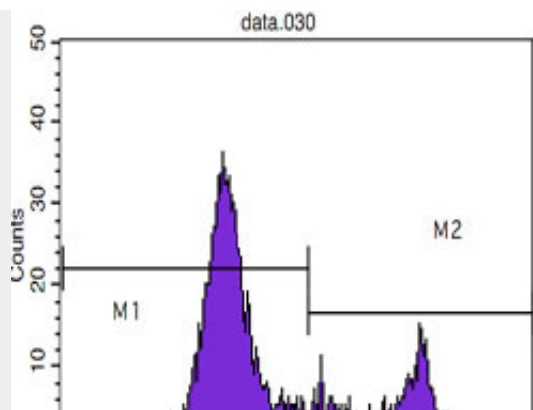


Figure 1: Flow cytometric analysis of blood T cells using CD8 mouse mAb (M2) and negative control (M1).

### CD8 Antibody - References

1. Veillette, A. et al. 1988. Cell 55:301.