

**CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone SPM548 ]**  
**Catalog # AH10854**

**Specification**

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**CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide - Product Information**

Application	,14,3,4,
Primary Accession	<a href="#">P01732</a>
Other Accession	<a href="#">925, 85258</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	32kDa KDa

**CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide - Additional Information**

**Gene ID** 925

**Other Names**

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

**Format**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide - 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

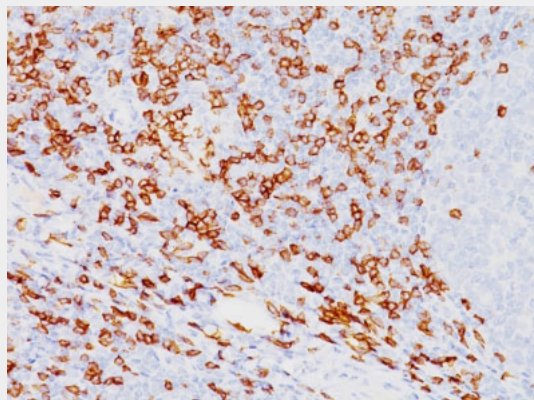
CD8 on thymus-derived T-cells usually consists of a disulfide-linked alpha/CD8A and a beta/CD8B chain. Less frequently, CD8 can be expressed as a CD8A homodimer. A subset of natural killer cells, memory T-cells, intraepithelial lymphocytes, monocytes and dendritic cells expresses CD8A homodimers. Expressed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

### CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide - 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](#)

### CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD8a Monoclonal Antibody (SPM548).

### CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide - Background

CD8 is a cell surface receptor expressed either as a heterodimer with the CD8  $\beta$  chain (CD8  $\alpha/\beta$ ) or as a homodimer (CD8  $\alpha/\alpha$ ). A majority of thymocytes and a subpopulation of mature T cells and NK cells express CD8a. CD8 binds to MHC class 1 and through its association with protein tyrosine kinase p56lck plays a role in T cell development and activation of mature T cells. For mature T-cells, CD4 and CD8 are mutually exclusive, so anti-CD8, generally used in conjunction with anti-CD4. It is a useful marker for distinguishing helper/inducer T-lymphocytes, and most peripheral T-cell lymphomas are CD4+/CD8-. Anaplastic large cell lymphoma is usually CD4+ and CD8-, and in T-lymphoblastic lymphoma/leukemia, CD4 and CD8 are often co-expressed. CD8 is also found in littoral cell angioma of the spleen.

#### **CD8A (Cytotoxic- & Suppressor T-Cell Marker) Antibody - With BSA and Azide - References**

Mason DY, et. al. Journal of Clinical Pathology, 1992, 45(12):1084-8