10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

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

Application	**IHC-P, IF, FC**
Primary Accession	P01732
Other Accession	925, 85258
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

Application Note
IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

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.

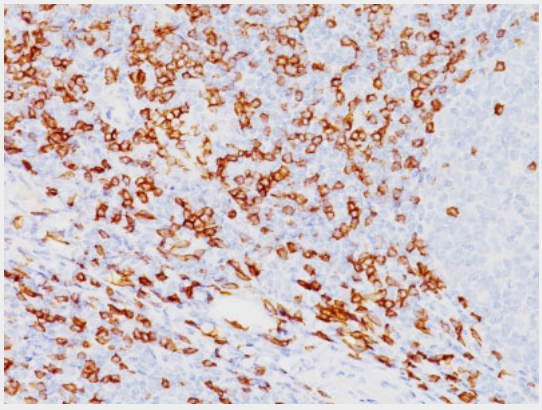
Tissue Location
CD8 on thymus-derived T-cells usually consists of a disulfide-linked alpha/CD8A and a beta/CD8B chain. Less frequently, CD8 can be expressed as a CD8A homodimer. A subset of natural killer cells, memory T-cells, intraepithelial lymphocytes, monocytes and dendritic cells expresses CD8A 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 Cytomety
- 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 β chain (CD8 α/β) or as a homodimer (CD8 α/α). 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