

**CD8B (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone BU88 ]**  
**Catalog # AH12641**

**Specification**

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**CD8B (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide - Product Information**

Application	,3,4,
Primary Accession	<a href="#">P10966</a>
Other Accession	<a href="#">926, 405667</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	32kDa KDa

**CD8B (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide - Additional Information**

**Gene ID** 926

**Other Names**

T-cell surface glycoprotein CD8 beta chain, CD8b, CD8B, CD8B1

**Storage**

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

**Precautions**

CD8B (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**CD8B (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide - Protein Information**

**Name** CD8B

**Synonyms** CD8B1

**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. A palmitoylation site in the cytoplasmic tail of CD8B chain contributes to partitioning of CD8 into the plasma membrane lipid rafts where signaling proteins are enriched. Once LCK recruited, it initiates different intracellular signaling pathways by phosphorylating

various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T-lymphocytes (CTLs). Additionally, plays a critical role in thymic selection of CD8+ T-cells.

#### **Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Note=Requires the partner CD8A for efficient cell surface expression (PubMed:3145196). The heterodimer CD8A/CD8B localizes to lipid rafts due to CD8B cytoplasmic tail palmitoylation. [Isoform 3]: Secreted. [Isoform 5]: Cell membrane; Single- pass type I membrane protein [Isoform 7]: Secreted.

#### **Tissue Location**

Isoform 1, isoform 3, isoform 5, isoform 6, isoform 7 and isoform 8 are expressed in both thymus and peripheral CD8+ T- cells. Expression of isoform 1 is higher in thymus CD8+ T-cells than in peripheral CD8+ T-cells. Expression of isoform 6 is higher in peripheral CD8+ T-cells than in thymus CD8+ T-cells

### **CD8B (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](#)

### **CD8B (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide - Images**

### **CD8B (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide - Background**

The T cell receptor (TCR) is a heterodimer composed of either  $\alpha$  and  $\beta$  or  $\gamma$  and  $\delta$  chains. CD3 chains and the CD4 or CD8 co-receptors are also required for efficient signal transduction through the TCR. The TCR is expressed on T helper and T cytotoxic cells that can be distinguished by their expression of CD4 and CD8. T helper cells express CD4 proteins and T cytotoxic cells display CD8. CD8 (also designated Leu 2 or T8), a cell surface glycoprotein, is a two chain complex ( $\alpha$ - $\beta$  or  $\gamma$ - $\delta$ ) receptor that binds class I MHC molecules presented by the antigen-presenting cell (APC). A primary function of CD8 is to facilitate antigen recognition by the TCR and to strengthen the avidity of the TCR-antigen interactions. An additional role for CD8-expressing T cells may be to maintain low levels of HIV expression.

### **CD8B (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide - References**

Knapp W. et. al. Leukocyte Typing IV, p342-343, Oxford University Press, 1989 | Parnes JR, CD4 and CD8 in T cell lineage commitment: alterations induced by expression of a CD8/CD4 chimeric transgene. HYPERLINK /htbin-post/Entrez/query?uid=8000031&form=6&db=m&Dopt=bSemin Immunol 1994, 6:221-229