

### **CD8B Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1440a

## **Specification**

# CD8B Antibody (N-term) - Product Information

**Application** WB, FC, E **Primary Accession** P10966 Other Accession A6NIW9 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 64-92

## CD8B Antibody (N-term) - Additional Information

#### Gene ID 926

#### **Other Names**

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

# **Target/Specificity**

This CD8B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 64-92 amino acids from the N-terminal region of human CD8B.

#### **Dilution**

WB~~1:1000 FC~~1:10~50

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

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

## **Precautions**

CD8B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## CD8B Antibody (N-term) - 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**

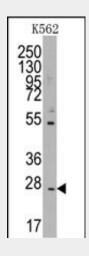
Isoform 1, isoform 3, isoform 5, isoform 6, isoform 7 and isoform 8 are expressed in both thymus and peripheral CD8+ T- cells. Expression of isoform 1 is higher in thymus CD8+ T-cells than in peripheral CD8+ T-cells. Expression of isoform 6 is higher in peripheral CD8+ T-cells than in thymus CD8+ T-cells

# CD8B Antibody (N-term) - Protocols

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

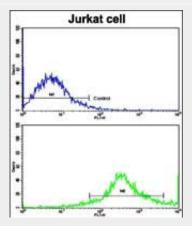
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## CD8B Antibody (N-term) - Images





Western blot analysis of anti-CD8B1 Pab (Cat.#AP1440a) in K562 cell line lysates (35ug/lane). CD8B1(arrow) was detected using the purified Pab.



Flow cytometric analysis of jurkat cells using CD8B Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# CD8B Antibody (N-term) - Background

The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T-cell receptor on the T lymphocyte recognize antigen displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional coreceptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains.

# CD8B Antibody (N-term) - References

Nakayama, K., J. Immunol. 148 (6), 1919-1927 (1992) Terry, L.A., Tissue Antigens 35 (2), 82-91 (1990) Parnes, J.R., Adv. Immunol. 44, 265-311 (1989)