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CD8B1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11957b

Specification

CD8B1 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P10966
Other Accession	A6NJW9, NP_004922
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**23722**
Antigen Region	**141-167**

CD8B1 Antibody (C-term) - Additional Information

Gene ID 926

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

Target/Specificity
This CD8B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 141-167 amino acids from the C-terminal region of human CD8B1.

Dilution
WB~~1:1000

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
CD8B1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD8B1 Antibody (C-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

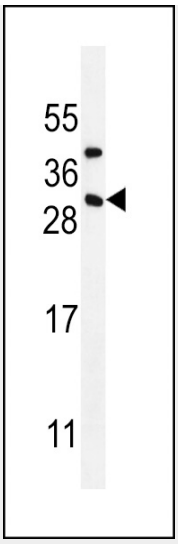
CD8B1 Antibody (C-term) - Protocols

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

CD8B1 Antibody (C-term) - Images

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CD8B1 Antibody (C-term) (Cat. #AP11957b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the CD8B1 antibody detected the CD8B1 protein (arrow).

CD8B1 Antibody (C-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 antigens 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. This gene encodes the CD8 beta chain isoforms. Multiple alternatively spliced transcript variants encoding distinct membrane associated or secreted isoforms have been described. A pseudogene, also located on chromosome 2, has been identified.

CD8B1 Antibody (C-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
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Stove, V., et al. J. Virol. 79(17):11422-11433(2005)
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