

#### **CD8a Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51966

### **Specification**

## **CD8a Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, E
P01732
Human, Mouse, Rat
Rabbit
Polyclonal
26 KDa

# **CD8a Antibody - Additional Information**

Gene ID 925

#### **Other Names**

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

#### **Dilution**

WB~~1:1000 E~~N/A

#### Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

### Storage

Store at -20 °C. Stable for 12 months from date of receipt

## **CD8a Antibody - 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 Antibody - 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 Antibody - Images

# CD8a Antibody - Background

Identifies cytotoxic/suppressor T-cells that interact with MHC class I bearing targets. CD8 is thought to play a role in the process of T-cell mediated killing. CD8 alpha chains binds to class I MHC molecules alpha-3 domains.

### **CD8a Antibody - References**

Littman D.R.,et al.Cell 40:237-246(1985).
Parnes J.R.,et al.Behring Inst. Mitt. 77:48-55(1985).
Sukhatme V.P.,et al.Cell 40:591-597(1985).
Nakayama K.,et al.Immunogenetics 30:393-397(1989).
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