

# CD8 Antibody

Rabbit mAb Catalog # AP90543

### **Product Information**

**Application** WB, IHC, IF, ICC, IHF

Primary Accession P01732
Reactivity Human
Clonality Monoclonal

Other Names CD8;T-cell surface glycoprotein CD8 alpha chain; Leu2; CD8A; MAL; T8 T cell

antigen;

IsotypeRabbit IgGHostRabbitCalculated MW25729

#### **Additional Information**

**Dilution** WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human CD8

**Description** 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.

**Storage Condition and Buffer** Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **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.

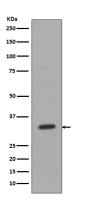
#### **Cellular Location**

[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

## **Images**



Western blot analysis of CD8 expression in Jurkat cell lysate.

Image not found: 202311/AP90543-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human colon, using CD8 Antibody.

Image not found: 202311/AP90543-IF.jpg

Immunofluorescent analysis of Jurkat cells, using CD8 Antibody .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.