

# Anti-CD8 CD8A Rabbit Monoclonal Antibody

Catalog # ABO13249

## Specification

# Anti-CD8 CD8A Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC
Primary Accession	<u>P01732</u>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	-
Anti-CD8 CD8A Rabbit Monoclonal A	Antibody . Tested in WB, IHC, ICC/IF applications. This antibody
reacts with Human.	

# Anti-CD8 CD8A Rabbit Monoclonal 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

Calculated MW 25729 MW KDa

Application Details WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200

**Subcellular Localization** Isoform 1: Cell membrane; Single-pass type I membrane protein.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human CD8

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-CD8 CD8A Rabbit Monoclonal 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

## Anti-CD8 CD8A Rabbit Monoclonal Antibody - Protocols

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

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

Anti-CD8 CD8A Rabbit Monoclonal Antibody - Images





All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.



Immunohistochemical analysis of paraffin-embedded Rat kidney, using the Antibody at 1:100



# dilution.



Immunohistochemical analysis of paraffin-embedded Human glioblastoma, using the Antibody at 1:600 dilution.



Immunohistochemical analysis of paraffin-embedded Human kidney, using the Antibody at 1:600 dilution.





Immunohistochemical analysis of paraffin-embedded Mouse skin, using the Antibody at 1:100 dilution.



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



Immunofluorescent analysis using the Antibody at 1:150 dilution.





Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis of Jurkat cells, using CD8 Antibody .



Figure 1. Western blot analysis of CD8A using anti-CD8A antibody (M02236-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human 293T whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was



incubated with rabbit anti-CD8A antigen affinity purified monoclonal antibody (Catalog # M02236-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD8A at approximately 36 kDa. The expected band size for CD8A is at 26 kDa.