

# **Anti-CD8 CD8A Rabbit Monoclonal Antibody**

**Catalog # ABO13249** 

#### **Specification**

# **Anti-CD8 CD8A Rabbit Monoclonal Antibody - Product Information**

Application WB, IHC, IF, ICC

Primary Accession
Host
Rabbit
Isotype
Reactivity
Clonality
Format
Rabbit IgG
Human
Monoclonal
Liquid

**Description** 

Anti-CD8 CD8A Rabbit Monoclonal 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</br>

### **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

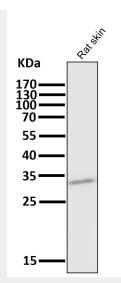
### Anti-CD8 CD8A Rabbit Monoclonal Antibody - Protocols

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

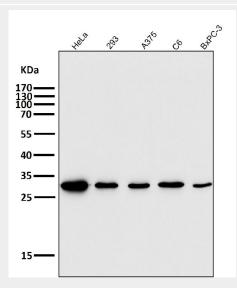
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-CD8 CD8A Rabbit Monoclonal Antibody - Images

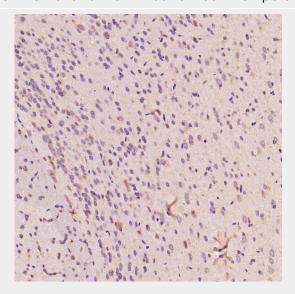




All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.



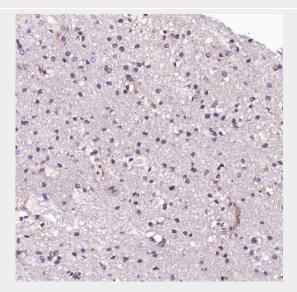
All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.



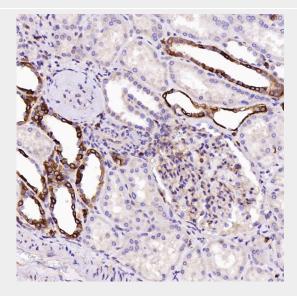
Immunohistochemical analysis of paraffin-embedded Rat kidney, using the Antibody at 1:100



dilution.

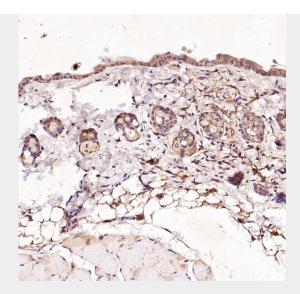


Immunohistochemical analysis of paraffin-embedded Human glioblastoma, using the Antibody at 1:600 dilution.

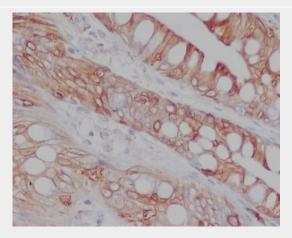


Immunohistochemical analysis of paraffin-embedded Human kidney, using the Antibody at 1:600 dilution.

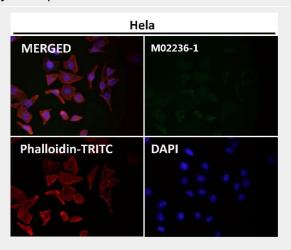




Immunohistochemical analysis of paraffin-embedded Mouse skin, using the Antibody at 1:100 dilution.

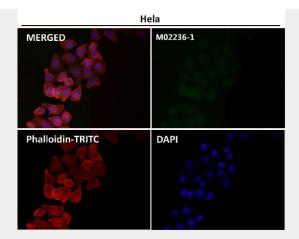


Immunohistochemical analysis of paraffin-embedded human colon, using CD8 Antibody.

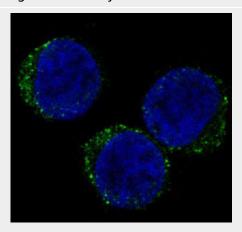


Immunofluorescent analysis using the Antibody at 1:150 dilution.





Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis of Jurkat cells, using CD8 Antibody .

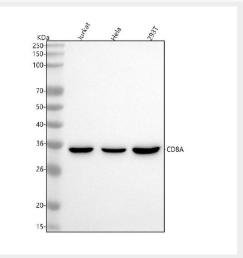


Figure 1. Western blot analysis of CD8A using anti-CD8A antibody (M02236-1).

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





Tel: 858.875.1900 Fax: 858.875.1999

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.