10320 Camino Santa Fe, Suite G
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Anti-CD8 CD8A Rabbit Monoclonal Antibody

Catalog # ABO13249

Specification

Anti-CD8 CD8A Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC**
Primary Accession	P01732
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**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
IHC 1:50-1:200
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.

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

Anti-CD8 CD8A Rabbit Monoclonal Antibody - Images

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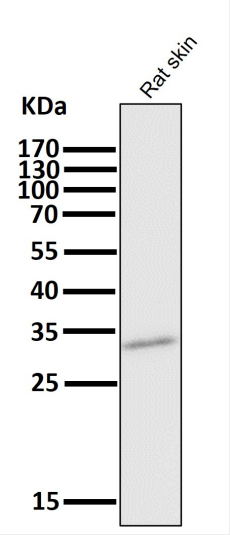
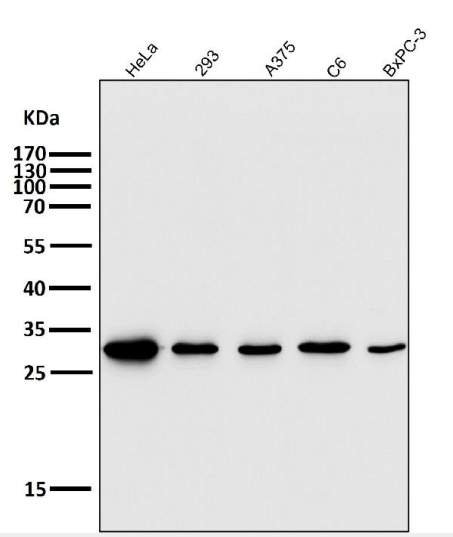
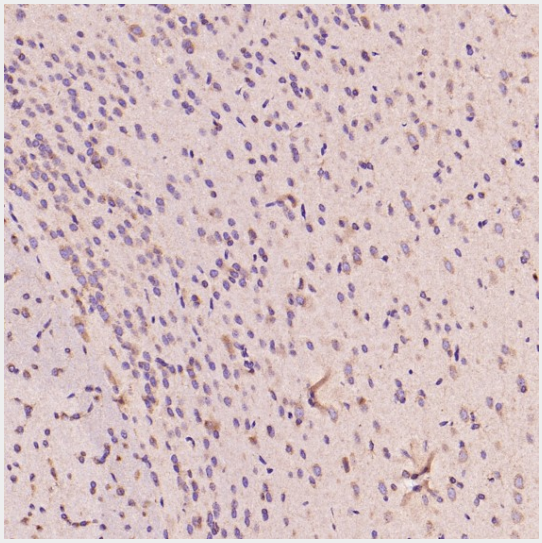


All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.

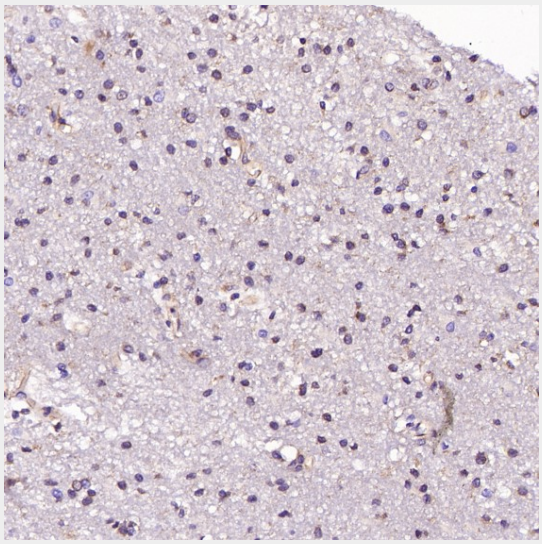


All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.

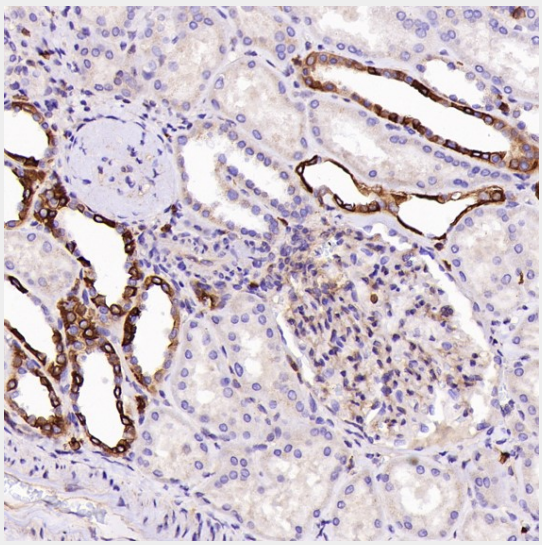


Immunohistochemical analysis of paraffin-embedded Rat kidney, using the Antibody at 1:100

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.

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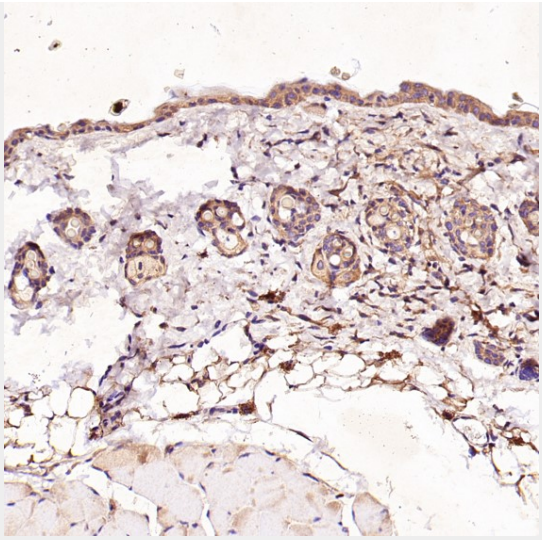
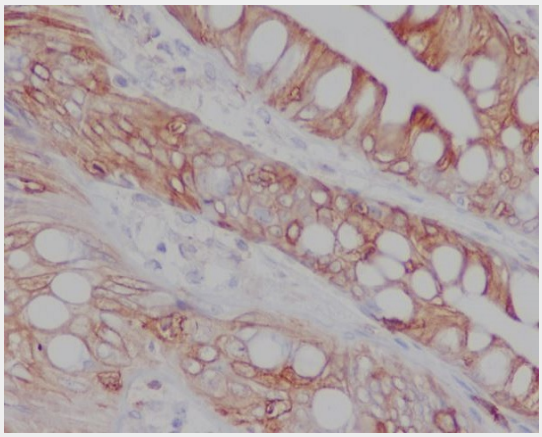
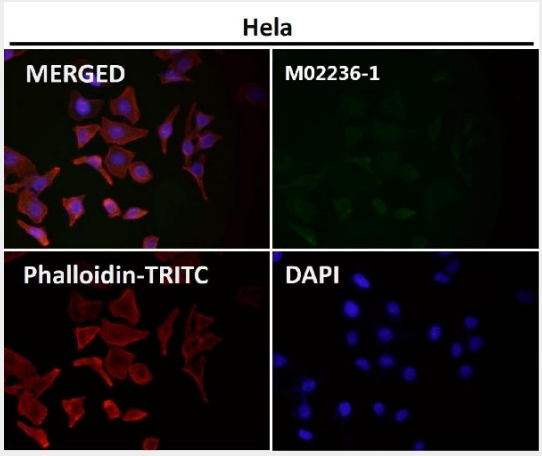


Immunohistochemical analysis of paraffin-embedded Mouse skin, using the Antibody at 1:100 dilution.



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



Immunofluorescent analysis using the Antibody at 1:150 dilution.

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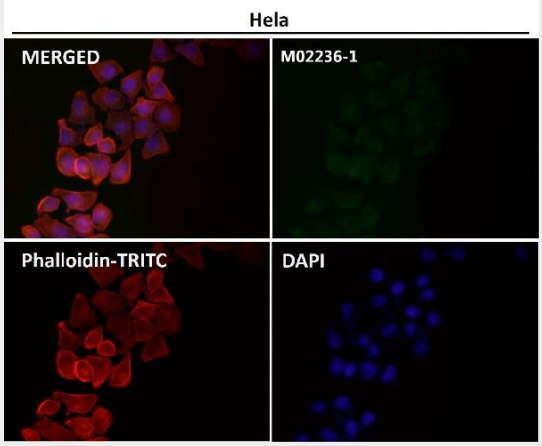
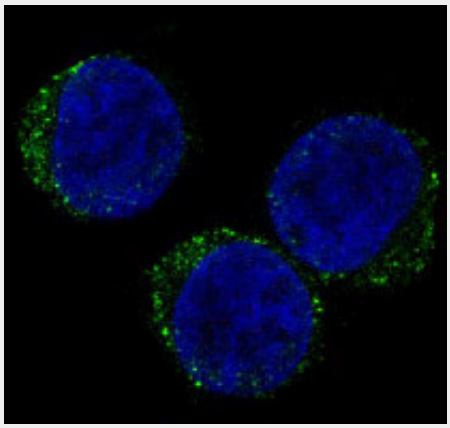


Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis of Jurkat cells, using CD8 Antibody .

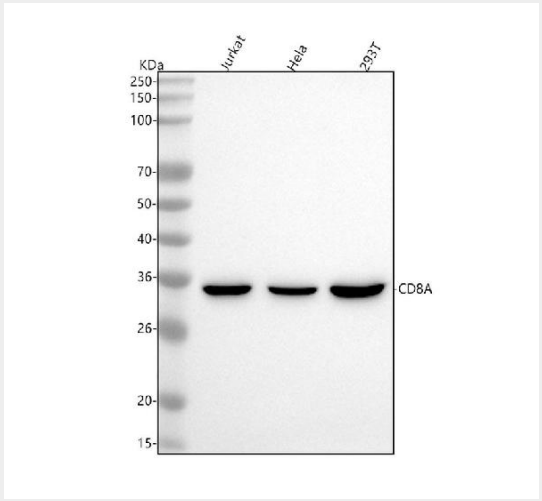


Figure 1. Western blot analysis of CD8A using anti-CD8A antibody (M02236-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Jurkat whole 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.