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CD8A Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1414b

Specification

CD8A Antibody (C-term) - Product Information

Application	**WB, FC, IHC-P,E**
Primary Accession	P01732
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**25729**
Antigen Region	**150-180**

CD8A Antibody (C-term) - Additional Information

Gene ID 925

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

Target/Specificity
This CD8A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 150-180 amino acids from the C-terminal region of human CD8A.

Dilution
WB~~1:1000
FC~~1:10~50
IHC-P~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CD8A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CD8A Antibody (C-term) - 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 (C-term) - 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 (C-term) - Images

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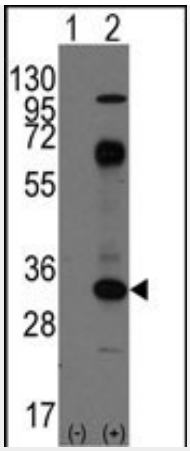
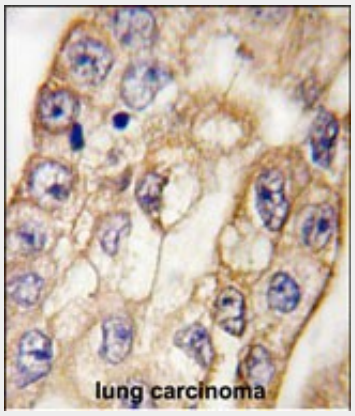
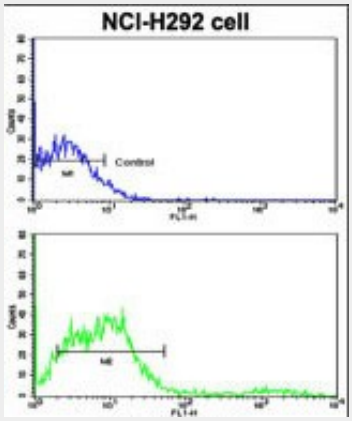


Western blot analysis of CD8A(arrow) using rabbit polyclonal CD8A Antibody (C-term) (Cat.#AP1414b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CD8A gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with CD8A antibody (C-term) (Cat.#AP1414b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of NCI-H292 cells using CD8A Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CD8A Antibody (C-term) - Background

The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that

mediates efficient cell-cell interactions within the immune system. The CD8 antigen, acting as a co-receptor, and the T-cell receptor on the T lymphocyte recognize antigen displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional co-receptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains.

CD8A Antibody (C-term) - References

Mancebo,E., Mol. Immunol. 45 (2), 479-484 (2008)
Zhou,H., Transplant. Proc. 39 (10), 3065-3067 (2007)
Borchers,M.T., Exp. Mol. Pathol. 83 (3), 301-310 (2007)

CD8A Antibody (C-term) - Citations

- Laser Therapy Inhibits Tumor Growth in Mice by Promoting Immune Surveillance and Vessel Normalization.