

**CD8A Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1414a****Specification**

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**CD8A Antibody (N-term) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P01732</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>25729</b>
Antigen Region	<b>59-88</b>

**CD8A Antibody (N-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 59-88 amino acids from the N-terminal region of human CD8A.

**Dilution**WB~~1:1000  
IHC-P~~1:10~50**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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CD8A Antibody (N-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

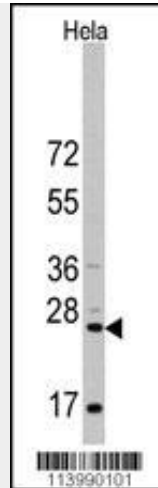
#### **CD8A Antibody (N-term) - Protocols**

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

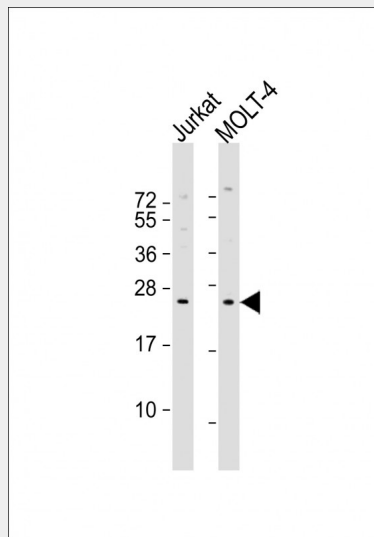
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **CD8A Antibody (N-term) - Images**

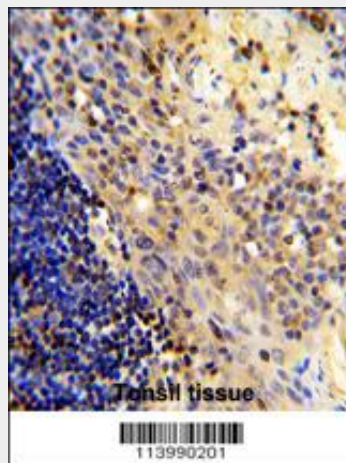




Western blot analysis of anti-CD8A Antibody (N-term) (Cat.#AP1414a) in HeLa cell line lysates (35ug/lane). CD8A (arrow) was detected using the purified Pab.



All lanes : Anti-CD8A Antibody (N-term) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: MOLT-4 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



Formalin-fixed and paraffin-embedded human tonsil tissue reacted with CD8A Antibody (N-term),

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.

### **CD8A Antibody (N-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 coreceptor, 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 coreceptor 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 (N-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 (N-term) - Citations**

- [Tumour and immune cell dynamics explain the PSA bounce after prostate cancer brachytherapy.](#)