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# Anti-CD8 alpha Picoband Antibody

**Catalog # ABO10238**

## Specification

### Anti-CD8 alpha Picoband Antibody - Product Information

| | |
|---|---|
| Application | **WB, IHC-P, FC, E** |
| Primary Accession | P01731 |
| Host | **Rabbit** |
| Reactivity | **Mouse, Rat** |
| Clonality | **Polyclonal** |
| Format | **Lyophilized** |

**Description**
Rabbit IgG polyclonal antibody for CD8 alpha detection. Tested with WB, IHC-P, FCM, Direct ELISA in Mouse;Rat.

**Reconstitution**
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-CD8 alpha Picoband Antibody - Additional Information

**Gene ID** 12525

**Other Names**
T-cell surface glycoprotein CD8 alpha chain, T-cell surface glycoprotein Lyt-2, CD8a, Cd8a, Lyt-2, Lyt2

**Application Details**
Western blot, 0.1-0.5 µg/ml<br><br> Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml<br><br> Flow Cytometry, 1-3Î¼g/1x10<sup>6</sup> cells<br><br> Direct ELISA, 0.1-0.5 µg/ml<br>

**Subcellular Localization**
Membrane; Single-pass type I membrane protein.

**Contents**
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**
E. coli-derived mouse CD8 alpha recombinant protein (Position: K28-Y196).

**Cross Reactivity**
No cross reactivity with other proteins.

| | |
|---|---|
| Storage | **At -20˚C; for one year. After r˚Constitution, at 4˚C; for one month. It˚Can also be aliquotted and stored frozen at -20˚C; for a longer time. Avoid repeated freezing and thawing.** |

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## Anti-CD8 alpha Picoband Antibody - Protein Information

**Name** Cd8a

**Synonyms** Lyt-2, Lyt2

**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**
Cell membrane {ECO:0000250|UniProtKB:P01732}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P01732} Note=Cd8a localizes to lipid rafts only when associated with its partner Cd8b. {ECO:0000250|UniProtKB:P01732}

## Anti-CD8 alpha Picoband 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 alpha Picoband Antibody - Images

## Anti-CD8 alpha Picoband Antibody - 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. It is mapped to 2p11.2. 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. This gene also encodes the CD8 alpha chain isoforms.