

Anti-CD8 Alpha Picoband Antibody

Catalog # ABO11940

Product Information

Application	WB, IHC-P
Primary Accession	P01732
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for T-cell surface glycoprotein CD8 alpha chain(CD8A) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Isoform 1: Cell membrane; Single-pass type I membrane protein.
Source	Eukaryota
Protein Name	T-cell surface glycoprotein CD8 alpha chain
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human CD8 alpha recombinant protein (Position: S22-A187). Human CD8 alpha shares 49% and 47% amino acid (aa) sequence identity with mouse and rat CD8 alpha, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, 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.

Sequence Similarities

Contains 1 Ig-like V-type (immunoglobulin-like) domain.

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.

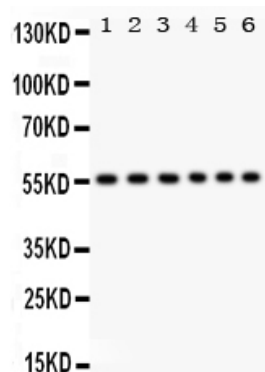
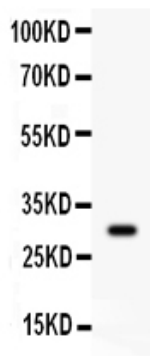
Tissue Location CD8 on thymus-derived T-cells usually consists of a disulfide-linked alpha/CD8A and a beta/CD8B chain. Less frequently, CD8 can be expressed as a CD8A homodimer. A subset of natural killer cells, memory T-cells, intraepithelial lymphocytes, monocytes and dendritic cells expresses CD8A homodimers. Expressed at the cell surface of plasmacytoid dendritic cells upon herpes simplex virus-1 stimulation

Background

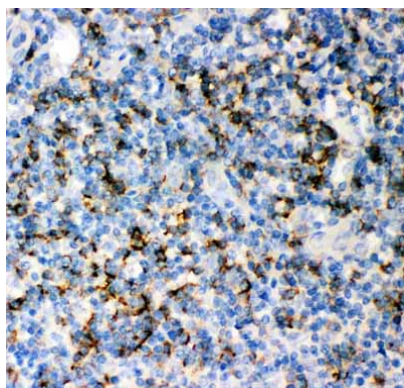
The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. It is mapped to 2p11.2. The CD8 antigen, acting as a coreceptor, and the T-cell receptor on the T lymphocyte recognize antigen displayed by an 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.

Images

Anti- CD 8 alpha Picoband antibody, ABO11940, Western blottingAll lanes: Anti CD 8 alpha (ABO11940) at 0.5ug/mlWB: Recombinant Human CD 8 alpha Protein 0.5ngPredicted bind size: 29KDObserved bind size: 29KD



Anti- CD 8 alpha Picoband antibody, ABO11940, Western blotting
 All lanes: Anti CD 8 alpha (ABO11940) at 0.5ug/ml
 Lane 1: JURKAT Whole Cell Lysate at 40ug
 Lane 2: RAJI Whole Cell Lysate at 40ug
 Lane 3: HL-60 Whole Cell Lysate at 40ug
 Lane 4: A549 Whole Cell Lysate at 40ug
 Lane 5: COLO320 Whole Cell Lysate at 40ug
 Lane 6: HELA Whole Cell Lysate at 40ug
 Predicted bind size: 26KD
 Observed bind size: 55KD



Anti- CD 8 alpha Picoband antibody, ABO11940,
 IHC(P)IHC(P): Human Tonsil Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.