

CD8 alpha Antibody

Rabbit mAb Catalog # AP90266

Specification

CD8 alpha Antibody - Product Information

Application IHC
Primary Accession P01732
Clonality Monoclonal

Other Names

T-cell surface glycoprotein CD8 alpha chain; T-lymphocyte differentiation antigen T8/Leu-2; CD8a;

CD8A; MAL

Isotype Rabbit IgG
Host Rabbit
Calculated MW 25729 Da

CD8 alpha Antibody - Additional Information

Dilution IHC~~1:100~500

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

CD8 alpha

Description Identifies cytotoxic/suppressor T-cells that

interact with MHC class I bearing targets. CD8 is thought to play a role in the process of T-cell mediated killing. CD8 alpha chains binds to class I MHC molecules alpha-3

domains.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

CD8 alpha 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

CD8 alpha Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD8 alpha Antibody - Images