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Anti-CD8 Antibody (Monoclonal, CA-8)

Catalog # ABO10412

Specification

Anti-CD8 Antibody (Monoclonal, CA-8) - Product Information

Application	**IHC-F**
Primary Accession	P05541
Host	**Mouse**
Isotype	**Mouse IgG2a**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Mouse IgG monoclonal antibody for CD8, CD8a molecule; CD8b molecule (CD8A; CD8B) detection. Tested with IHC-F in Human. No cross reactivity with other proteins.

Reconstitution
Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Anti-CD8 Antibody (Monoclonal, CA-8) - Additional Information

Gene ID 24931

Other Names
T-cell surface glycoprotein CD8 beta chain, CD8 antigen 37 kDa chain, OX-8 membrane antigen, CD8b, Cd8b, Cd8b1

Calculated MW
23400 MW KDa

Application Details
Immunohistochemistry(Frozen Section), 1 µg/ml, Human

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

Protein Name
T-cell surface glycoprotein CD8 alpha chain; T-cell surface glycoprotein CD8 beta chain

Contents
Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.

Immunogen
Human thymocytes followed by peripheral blood T cells.

Purification
Ascites

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.**

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

Anti-CD8 Antibody (Monoclonal, CA-8) - Protein Information

Name Cd8b

Synonyms Cd8b1

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. A palmitoylation site in the cytoplasmic tail of CD8B chain contributes to partitioning of CD8 into the plasma membrane lipid rafts where signaling proteins are enriched. Once LCK recruited, it initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T-lymphocytes (CTLs). Additionally, plays a critical role in thymic selection of CD8+ T-cells.

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:P10966}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P10966} Note=Requires the partner CD8A for efficient cell surface expression The heterodimer CD8A/CD8B localizes to lipid rafts due to CD8B cytoplasmic tail palmitoylation. {ECO:0000250|UniProtKB:P10966}

Anti-CD8 Antibody (Monoclonal, CA-8) - 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 Antibody (Monoclonal, CA-8) - Images

Anti-CD8 Antibody (Monoclonal, CA-8) - Background

The human lymphocyte differentiation antigen CD8 is encoded by a single gene that gives rise to a

33- to 34-kDa glycoprotein expressed on the cell surface as a dimer and in higher molecular mass forms.