

# CD8 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AD80067

#### **Product Information**

**Application** IHC **Primary Accession** P01732 Reactivity Human Host Mouse Clonality Monoclonal Isotype IgG1 **Clone Names** 457F6F8 Calculated MW 25729

### **Additional Information**

**Gene ID** 925 **Gene Name** CD8A

Other Names T-cell surface glycoprotein CD8 alpha chain, T-lymphocyte differentiation

antigen T8/Leu-2, CD8a, CD8A, MAL

**Dilution** IHC~~Ready-to-use

**Storage** Maintain refrigerated at 2-8°C.

**Precautions** CD8 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name CD8A

Synonyms MA

**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

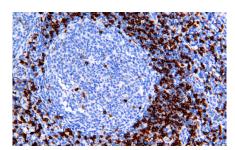
#### **Cellular Location**

#### **Tissue Location**

homodimer molecules also promote the survival and differentiation of activated lymphocytes into memory CD8 T-cells.

[Isoform 1]: Cell membrane; Single-pass type I membrane protein Note=CD8A localizes to lipid rafts only when associated with its partner CD8B. 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

## **Images**



Immunohistochemical analysis of paraffin-embedded human tonsil tissue using AD80067 performed on the Abcarta® FAIP-48 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSeeTM Detection Systems (Abcepta: ADR005) was used as the secondary antibody.

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