

**AM10073PU-N****Monoclonal Antibody to CD8 (C-term) - Purified****Alternate names:**

CD8 alpha chain, CD8A, MAL, T-cell surface glycoprotein CD8 alpha chain, T-lymphocyte differentiation antigen T8/Leu-2

**Quantity:**

0.2 mg

**Concentration:**

0.2 mg/ml

**Background:**

CD8 is a cell surface glycoprotein molecule expressed on the surface of a subset of T cells, generally the cytotoxic/suppressor cells, as well as on some natural killer cells. There are two forms of CD8, either as an alpha-alpha homodimer or alpha-beta heterodimer. The pathological role of CD8 has been observed in familial CD8 deficiency.

A majority of thymocytes and a subpopulation of mature T cells and NK cells express CD8a. CD8 binds to MHC class 1 and through its association with protein tyrosine kinase p56lck plays a role in T cell development and activation of mature T cells. For mature T-cells, CD4 and CD8 are mutually exclusive, so anti-CD8, generally used in conjunction with anti-CD4. It is a useful marker for distinguishing helper/inducer T-lymphocytes, and most peripheral T-cell lymphomas are CD4+/CD8-. Anaplastic large cell lymphoma is usually CD4+ and CD8-, and in T-lymphoblastic lymphoma/leukemia, CD4 and CD8 are often co-expressed. CD8 is also found in littoral cell angioma of the spleen.

**Uniprot ID:**

[P01732](#)

**NCBI:**

[NP\\_001139345.1](#)

**GeneID:**

[925](#)

**Host / Isotype:**

Mouse / IgG1

**Recommended Isotype Controls:**

SM10P (for use in human samples), AM03095PU-N

**Clone:**

C8/144B

**Immunogen:**

A 13 amino acid peptide from C-terminal cytoplasmic domain of alpha chain of Human CD8 molecule.

**Format:**

**State:** Liquid purified IgG fraction from Bioreactor Concentrate

**Purification:** Protein A/G Chromatography

**Buffer System:** 10mM PBS

**Preservatives:** 0.05% Sodium Azide

**Stabilizers:** 0.05% BSA

**Applications:**

**ELISA:** Use BSA free Antibody for coating.

**Flow Cytometry:** 0.5-1 µg/10<sup>6</sup> cells.

**Immunofluorescence:** 0.5-1 µg/ml.

**Western Blot:** 0.5-1 µg/ml.

**Immunoprecipitation:** 1-2 µg/500 µg protein lysate.

**Immunohistochemistry on Frozen Sections:** 1-2 µg/ml.

**Immunohistochemistry on Paraffin Sections:** 1-2 µg/ml.

***Incubation Time:*** 30 minutes at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.

***Positive Control:*** HuT78 or hPBL, Tonsil.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Molecular Weight:**

32 kDa

**Specificity:**

Recognizes Human CD8. Other species not tested.

***Cellular Localization:*** Cell surface.

**Storage:**

Store undiluted at 2-8°C.

Shelf life: one year from despatch.

**General Readings:**

1. Mason DY, Cordell JL, Gaulard P, Tse AG, Brown MH. Immunohistological detection of human cytotoxic/suppressor T cells using antibodies to a CD8 peptide sequence. J Clin Pathol. 1992 Dec;45(12):1084-8. PubMed PMID: 1479035.

**Pictures:**

Formalin-Fixed, Paraffin-Embedded  
Human tonsil stained with CD8 Antibody  
Cat.-No AM10073PU (Clone C8/144B).  
Note Cell surface staining.

