

Anti-Human CD8a Antibody, Clone RPA-T8



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Antibodies

Mouse monoclonal IgG1 antibody
against human, rhesus, cynomolgus
CD8a, unconjugated

Catalog #60022

100 µg 0.5 mg/mL

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

Product Description

The RPA-T8 antibody reacts with CD8a, a 32 - 34 kDa type I transmembrane glycoprotein which is a subunit of CD8. CD8 is a disulfide-bonded dimer, found either as a heterodimer of CD8a (α) and CD8b (β) subunits (i.e., αβ) or a homodimer (αα). CD8 acts as a co-receptor to the T cell receptor (TCR) during T cell activation by binding MHC Class I molecules presented by an antigen-presenting cell. It functions to strengthen the association between the TCR and MHC I-antigen complex and to amplify signals from the TCR to the cytoplasm through the interaction of its intracellular domain with cytoplasmic tyrosine kinases such as Lck. The CD8a chain binds to the α3 domain of class I MHC molecules. CD8 is expressed by a majority of thymocytes, a subset of mature peripheral blood T cells (T cytotoxic cells), a proportion of β T cells, and at lower levels by NK cells (which predominantly express CD8a homodimers).

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|----------------------|--|
| Target Antigen Name: | CD8a |
| Alternative Names: | Leu2, T8 |
| Gene ID: | 925 |
| Species Reactivity: | Human, Rhesus, Cynomolgus, Baboon, Chimpanzee, Pigtailed Macaque, Sooty Mangabey |
| Host Species: | Mouse |
| Clonality: | Monoclonal |
| Clone: | RPA-T8 |
| Isotype: | IgG1, kappa |
| Immunogen: | Full-length human CD8 protein |
| Conjugate: | Unconjugated |

Applications

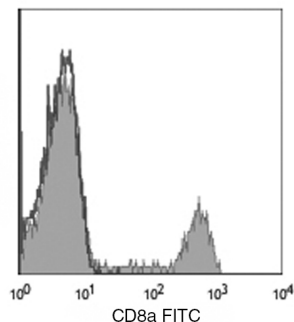
| | |
|-----------------------|---|
| Verified: | CellSep, FC |
| Reported: | CyTOF®, FA, FC, IHC |
| Special Applications: | This antibody clone has been verified for purity assessments of cells isolated with EasySep™ Human CD8+ T Cell Enrichment Kit (Catalog #19053). |

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

Properties

| | |
|------------------------|--|
| Formulation: | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide |
| Purification: | The antibody was purified by affinity chromatography. |
| Stability and Storage: | Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please request a lot-specific Certificate of Analysis from techsupport@stemcell.com . |
| Directions for Use: | For flow cytometry the suggested use of this antibody is ≤ 2.0 µg per 1 x 10 ⁶ cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application. |

Data



Flow cytometry analysis of human peripheral blood lymphocytes labeled with Anti-Human CD8a Antibody, Clone RPA-T8, followed by anti-mouse IgG, FITC (filled histogram) or a mouse IgG1, kappa isotype control antibody followed by anti-mouse IgG, FITC (open histogram).

Related Products

| PRODUCT NAME | CATALOG # | SIZE |
|--|-----------|-----------|
| Anti-Human CD8a Antibody, Clone RPA-T8 | 60022 | 100 µg |
| Anti-Human CD8a Antibody, Clone RPA-T8, PE | 60022PE | 100 tests |
| Anti-Human CD8a Antibody, Clone RPA-T8, PE | 60022PE.1 | 25 tests |
| Anti-Human CD8a Antibody, Clone RPA-T8, FITC | 60022FI | 100 tests |
| Anti-Human CD8a Antibody, Clone RPA-T8, FITC | 60022FI.1 | 25 tests |

References

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