

## Anti-Human CD8a Antibody, Clone RPA-T8, Biotin



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## Antibodies

Mouse monoclonal IgG1 antibody  
against human, rhesus, cynomolgus  
CD8a, biotin-conjugated

Catalog #60022BT  
#60022BT.1

100 µg 0.5 mg/mL  
25 µg 0.5 mg/mL

## 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 ( $\alpha$ ) and CD8b ( $\beta$ ) subunits (i.e.,  $\alpha\beta$ ) or a homodimer ( $\alpha\alpha$ ). 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  $\alpha 3$  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  $\beta$  T cells, and at lower levels by NK cells (which predominantly express CD8a homodimers).

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:	Biotin

## Applications

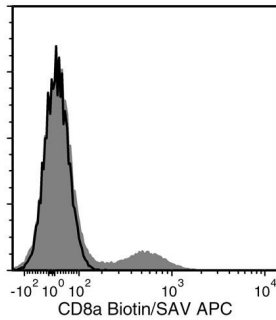
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Direct Human CD8+ T Cell Isolation Kit (Catalog #19663), EasySep™ Human CD8+ T Cell Enrichment Kit (Catalog #19053), EasySep™ Human CD8 Positive Selection Kit (Catalog #18053), EasySep™ Human CD3 Positive Selection Kit (Catalog #18051), EasySep™ HLA CD2 Positive Selection Kit (Catalog #18657HLA), and EasySep™ HLA T Cell Enrichment Kit (Catalog #19051HLA).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

## Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry the suggested use of this antibody is $\leq 0.125$ µg per $1 \times 10^6$ 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 mononuclear cells (PBMCs) labeled with Anti-Human CD8a Antibody, Clone RPA-T8, Biotin, followed by streptavidin (SAV) APC (filled histogram), or a mouse IgG1, kappa biotin isotype control antibody, followed by SAV APC (solid line histogram).

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

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