Anti-Human CD8a Antibody, Clone RPA-T8, FITC

Antibodies

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

Catalog	#60022FI	100 Tests	5 µL/test
	#60022FI.1	25 Tests	5 µL/test

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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).

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:	FITC (Fluorescein isothiocyanate)

Applications

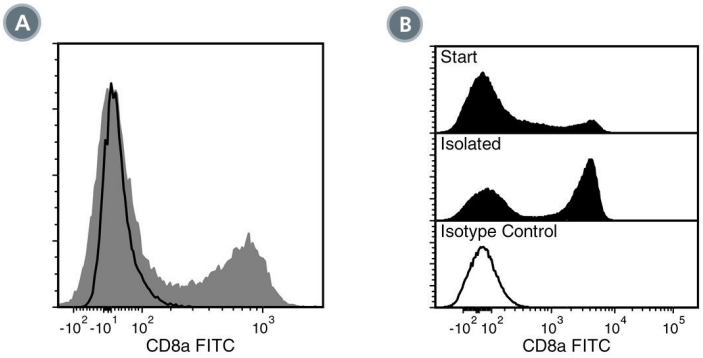
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Direct Human CD8+ T Cell Isolation Kit (Catalog #19663), EasySep™ Human CD8+ T Cell Enrichment Kit (Catalog #19053), EasySep™ Human CD8 Positive Selection Kit II (Catalog #17853), EasySep™ Human CD3 Positive Selection Kit II (Catalog #17851), 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 and 0.2% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry, the suggested use of this antibody is 5 µL per 1 x 10^6 cells in 100 µL or per 100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD8a Antibody, Clone RPA-T8, FITC (filled histogram) or a mouse IgG1, kappa FITC isotype control antibody (solid line histogram).
(B) Flow cytometry analysis of human PBMCs processed with the EasySep™ Human CD3 Positive Selection Kit and labeled with Anti-Human CD8a Antibody, Clone RPA-T8, FITC. Histograms show labeling of PBMCs (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa FITC isotype control antibody is shown (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, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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