Anti-Human CD8a Antibody, Clone SK1, PE

Antibodies

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

Catalog	#60125PE	100 Tests	5 µL/test
	#60125PE.1	25 Tests	5 µL/test

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Product Description

The SK1 antibody reacts with CD8a, a 32 - 34 kDa type I transmembrane glycoprotein that 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). Reportedly, the SK1 antibody exhibits a blocking effect on MHC:peptide tetramer binding to TCR and also blocks proliferation of Leu-2 T cells in mixed leukocyte reactions (MLR).

Target Antigen Name:	CD8a
Alternative Names:	Leu2, T8
Gene ID:	925
Species Reactivity:	Human, Rhesus, Cynomolgus, Chimpanzee, African Green Monkey, Pigtailed Macaque, Sooty Mangabey
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	SK1
Isotype:	IgG1, kappa
Immunogen:	Human peripheral blood T lymphocytes
Conjugate:	PE (Phycoerythrin)

Applications

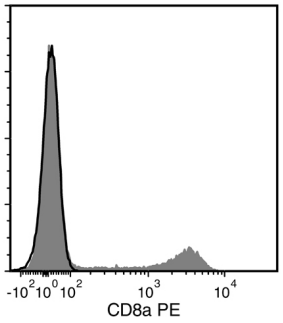
Verified:	FC
Reported:	FC

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 PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
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



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD8a Antibody, Clone SK1, PE (filled histogram) or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, PE (Catalog #60070PE) (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 or contact us at techsupport@stemcell.com.

References

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