

## 1A-174-T100

## Monoclonal Antibody to CD1a Allophycocyanin (APC) conjugated (100 tests)

Clone:	SK9
lsotype:	Mouse IgG2b
Specificity:	The mouse monoclonal antibody SK9 recognizes CD1a (T6), a 49 kDa polypeptide associated with beta2-microglobulin expressed on cortical thymocytes (strongly), Langerhans cells, dendritic cells and some T cell leukemias and lymphomas.
<b>Regulatory Status:</b>	RUO
Immunogen:	Human thymocytes
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 $\mu$ l reagent / 100 $\mu$ l of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD1a, together with CD1b and c, belongs to group 1 of CD1 glycoproteins. These proteins serve as antigen-presenting molecules for a subset of T cells that responds to specific lipids and glycolipids found in the cell walls of bacterial pathogens or self-glycolipid antigens such as gangliosides, and they have also roles in antiviral immunity. Unlike CD1b, CD1a is excluded from late endosomal compartments and instead traffics independently in the recycling pathway of the early endocytic system, and CD1a antigen presentation is independent upon vesicular acidification.

For laboratory research only, not for drug, diagnostic or other use.



References:

\*Zimmer MI, Larregina AT, Castillo CM, Capuano S 3rd, Falo LD Jr, Murphey-Corb M, Reinhart TA, Barratt-Boyes SM: Disrupted homeostasis of Langerhans cells and interdigitating dendritic cells in monkeys with AIDS. Blood. 2002 Apr 15;99(8):2859-68.

\*Brown KN, Trichel A, Barratt-Boyes SM: Parallel loss of myeloid and plasmacytoid dendritic cells from blood and lymphoid tissue in simian AIDS. J Immunol. 2007 Jun 1;178(11):6958-67.

\*Tenca C, Merlo A, Zarcone D, Saverino D, Bruno S, De Santanna A, Ramarli D, Fabbi M, Pesce C, Deaglio S, Ciccone E, Malavasi F, Grossi CE: Death of T cell precursors in the human thymus: a role for CD38. Int Immunol. 2003 Sep;15(9):1105-16.

\*Awasthi S, Wolf R, White G: Ontogeny and phagocytic function of baboon lung dendritic cells. Immunol Cell Biol. 2009 Jul;87(5):419-27. \*Kader M, Smith AP, Guiducci C, Wonderlich ER, Normolle D, Watkins SC, Barrat

\*Kader M, Smith AP, Guiducci C, Wonderlich ER, Normolle D, Watkins SC, Barrat FJ, Barratt-Boyes SM: Blocking TLR7- and TLR9-mediated IFN-α production by plasmacytoid dendritic cells does not diminish immune activation in early SIV infection. PLoS Pathog. 2013;9(7):e1003530.

\*Wood GS, Burns BF, Dorfman RF, Warnke RA: The immunohistology of non-T cells in the acquired immunodeficiency syndrome. Am J Pathol. 1985 Sep;120(3):371-9.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

For laboratory research only, not for drug, diagnostic or other use.