Datasheet for ABIN2689819

# anti-Sca-1/Ly-6A/E antibody

20 Publications

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## Overview

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| Quantity: | 0.5 mg |
| Target: | Sca-1/Ly-6A/E (Ly6a) |
| Reactivity: | Mouse |
| Host: | Rat |
| Clonality: | Monoclonal |
| Conjugate: | This Sca-1/Ly-6A/E antibody is un-conjugated |
| Application: | Flow Cytometry (FACS), Immunoprecipitation (IP), Immunohistochemistry (Frozen Sections) (IHC (fro)), Cytotoxicity Test (CyTox) |

## Product Details

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| Brand: | BD Pharmingen™ |
| Immunogen: | BALB/c mouse-derived "pre-T" cell hybridoma |
| Clone: | E13 |
| Isotype: | IgG2a kappa |
| Characteristics: | The E13-161.7 antibody reacts with Ly-6A.2 and Ly-6E.1, which are allelic members of the Ly-6 multigene family. Sca1 (Ly-6A/E), a phosphatidylinositol-anchored protein of about 18 kDa, is expressed on the multipotent hematopoietic stem cell (HSC) in mice with both Ly-6 haplotypes. Sca-1+ HSC are found in the adult bone marrow and fetal liver, but not in the early embryo yolk sac or intraembryonic hematopoietic sites, and can be mobilized to the peripheral blood and spleen in the adult. In mice expressing the Ly-6.2 haplotype (e.g., AKR, C57BL, C57BR, C57L, C58, DBA/2, PL, SJL, SWR, 129), Ly-6A/E is also expressed on distinct subpopulations of bone |

## Product Details

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| | marrow and peripheral B lymphocytes, myeloid cells, and thymic and peripheral T lymphocytes, on the earliest intrathymic T-cell precursor population, and in several non-hematopoietic tissues. Strains with the Ly-6.1 haplotype (e.g., A, BALB/c, CBA, C3H/He, DBA/1, NZB) have few Ly-6A/E+ resting peripheral lymphocytes, whereas activation of T cells from mice of both Ly-6 haplotypes leads to strong expression of the Sca-1 antigen. Studies with the D7 antibody (Cat. No. 557403) have demonstrated that Ly-6A/E may be involved in the regulation of B and T lymphocyte responses, and it appears to be required for T-cell receptor-mediated T-cell activation. Purified E13-161.7 mAb can block binding of FITC-conjugated D7 antibody (anti-Ly-6A/E, Cat. No. 557405) to mouse splenocytes, but purified mAb D7 (Cat. No. 557403) is unable to block binding of FITC-conjugated E13-161.7 antibody (Cat. No. 553335). Anti-Ly-6A/E (Sca-1) mAb may be used in combination with the Mouse Lineage Panel (Cat. No. 559971) to identify HSC. This antibody is routinely tested by flow cytometric analysis. Other applications were tested during antibody development only or reported in the literature.<br><br>BD Pharmingen™ Purified Rat Anti-Mouse Ly-6A/E - Purified - Clone E13-161.7 - Isotype Rat IgG2a, κ - Reactivity Ms - 0.5 mg |
| Purification: | The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. |

## Target Details

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| Target: | Sca-1/Ly-6A/E (Ly6a) |
| Alternative Name: | Ly-6A/E (Ly6a Products) |
| Background: | Synonyms: Sca-1 |
| Pathways: | Sensory Perception of Sound, Activated T Cell Proliferation |

## Application Details

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| Application Notes: | Optimal working dilution should be determined by the investigator. |
| Restrictions: | For Research Use only |

## Handling

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| Concentration: | 0.5 mg/mL |
| Buffer: | Aqueous buffered solution containing ≤0.09 % sodium azide. |

## Handling

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| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | 4 °C |
| Storage Comment: | Store undiluted at 4°C. |

## Publications

Product cited in:


Shinohara, Ikarashi, Maruoka, Miyata, Sugimura, Terada, Wakasugi: "Functional and phenotypical characteristics of hepatic NK-like T cells in NK1.1-positive and -negative mouse strains." in: **European journal of immunology**, Vol. 29, Issue 6, pp. 1871-8, (1999) (PubMed).

Bendelac: "Mouse NK1+ T cells." in: **Current opinion in immunology**, Vol. 7, Issue 3, pp. 367-74, (1995) (PubMed).

Hugo, Kappler, Godfrey, Marrack: "Thymic epithelial cell lines that mediate positive selection can also induce thymocyte clonal deletion." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 152, Issue 3, pp. 1022-31, (1994) (PubMed).

Tomonari, Fairchild: "Positive and negative selection of Tcrb-V6+ T cells." in: **Immunogenetics**, Vol. 36, Issue 4, pp. 230-7, (1992) (PubMed).

Haqqi, Banerjee, Anderson, David: "RIII S/J (H-2r). An inbred mouse strain with a massive deletion of T cell receptor V beta genes." in: **The Journal of experimental medicine**, Vol. 169, Issue 6, pp. 1903-9, (1989) (PubMed).


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